MAPPING AND EVIDENCE DOCUMENTATION FACTUAL REPORT OF INVESTIGATION

(40 Pages)

NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF HIGHWAY SAFETY
WASHINGTON, D.C. 20594

EVIDENCE DOCUMENTATION AND MAPPING FACTUAL INFORMATION

A. ACCIDENT

NTSB #: HWY-05-MH-034

Date and Time:	September 23, 2005 about 6:07 a.m. (CDT)
Type:	Motorcoach Fire
Location:	Northbound Interstate Highway 45, 0.2 miles south of Mars Rd., Near Wilmer, Dallas County, Texas
Vehicle:	1998 MCI 54-passenger Motorcoach
Motor Carrier:	Global Limo
Fatalities:	23
Injuries:	14

B. MAPPING GROUP

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C. ACCIDENT SUMMARY

On September 23, 2005 at about 6:07 a.m. CDT, a 1998 MCI 54-passenger motorcoach was traveling northbound on Interstate Highway 45 (I-45) with 44 passengers and the driver, evacuating in anticipation of Hurricane Rita. The passengers were from an assisted living facility in Bellaire, Texas, and most needed to be carried or assisted onto the motorcoach by firefighters. The trip began about 2:30 p.m. on September 22, 2005. The motorcoach had been traveling over 13 hours in heavy traffic when the right rear (#3 axle) tire went flat and needed to be changed near the FM 1126 overpass in Rice, Texas. The tire left approximately 6,800 ft. of tire marks before the motorcoach came to a stop. A service mechanic was summoned to assist and he changed the tire. The motorcoach continued north on I-45 for about 26 miles.

At approximately 6:00 a.m. a motorist noticed the right rear (#3 axle) hub was glowing red/white hot. He was able to stop the motorcoach in the traffic lane and tried to tell the driver (who did not speak English) of the danger. The motorcoach driver waited for traffic to clear and proceeded to pull the vehicle to the right shoulder. The motorcoach driver exited along with a nursing staff-passenger (the trip coordinator) and two other nurse-passengers and saw flames coming from the right rear wheel well. The passengers, with help from the nursing staff on-board and other motorist, began to disembark. At 6:07 the first call was made to 911. Fourteen intact oxygen cylinders were recovered from the motorcoach along with parts to possibly 4 others. One of those cylinders shows evidence of failure. Six nursing staff-passengers on the vehicle, a parent of one of the nursing staff, and 14 patient-passengers were able to exit the burning vehicle. Twenty-three patient-passengers, many of those who needed assistance in walking or needed to be carried off the vehicle were unable to escape.

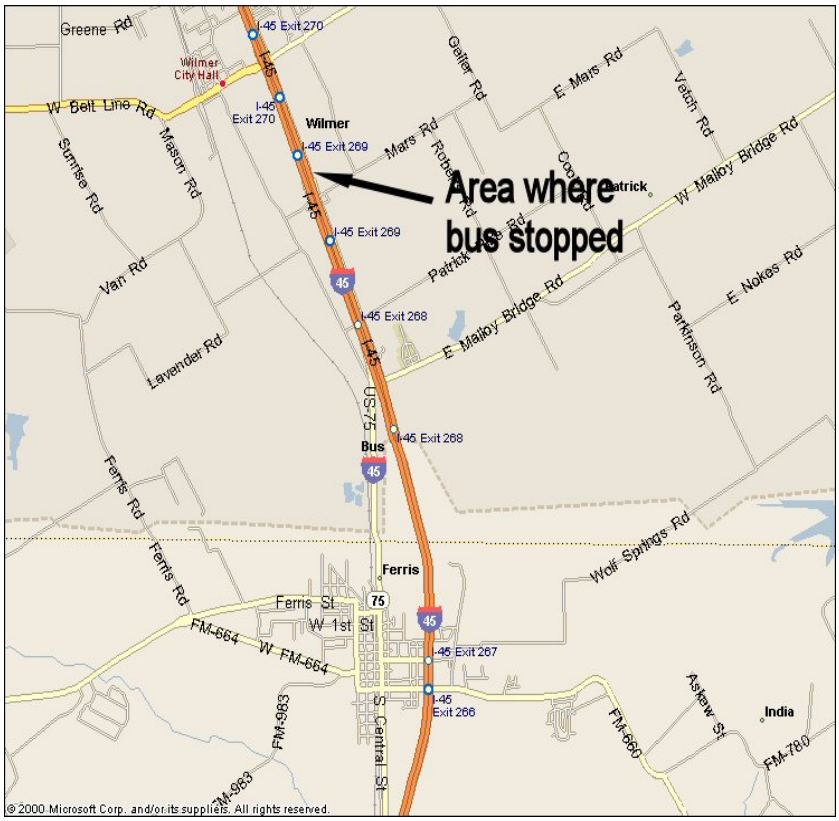

Figure – 1, map of I-45 and accident vicinity.

D. DETAILS OF THE INVESTIGATION

To document the accident scene and related environment, the mapping group members assisted by the Dallas County Sheriff's Department Courtesy Patrol, mapped two locations. The accident location was mapped on Sunday, September 25, 2005 and the second scene, where the bus stopped to repair a flat tire, was mapped on Monday September 26, 2005. Using a Sokkia SET-6E total station NTSB investigators, mapped the existing physical evidence and the roadway features in the immediate area of both locations.

1. SCENE DOCUMENTATION

1.1 GENERAL INFORMATION

The mapping jobs were as follows:

On Sunday, September 25, 2005, the instrument was set up on the northbound side of I-45, near Mars Road Exit 269, and various readings encompassing a straight line distance of about 2,300 feet were obtained. The mapping began approximately 1,244 feet south of the instrument, and continued north approximately 1,056 feet from the instrument. A total of 336 points were measured to document the physical evidence and to create a topographical forensic map of this section of highway and related features (see figure 2).

On Monday, September 26, 2005, the instrument was set up on the northbound side of I-45 and various readings encompassing a straight line distance of about 6,802 feet were obtained. The mapping began approximately 1,841 feet south of the instrument, and continued north approximately 1,687 feet from the instrument to a new reference point. Once the instrument was relocated to the second reference point the mapping continued north approximately 3,274 feet north of the instrument. A total of 329 points were measured to document the physical evidence and to create a topographical forensic map of this section of highway and related features (see figure 3). The scale on the original diagram was changed to allow for a more detailed view of each section of interstate that encompassed the first event (see figures 4-37).

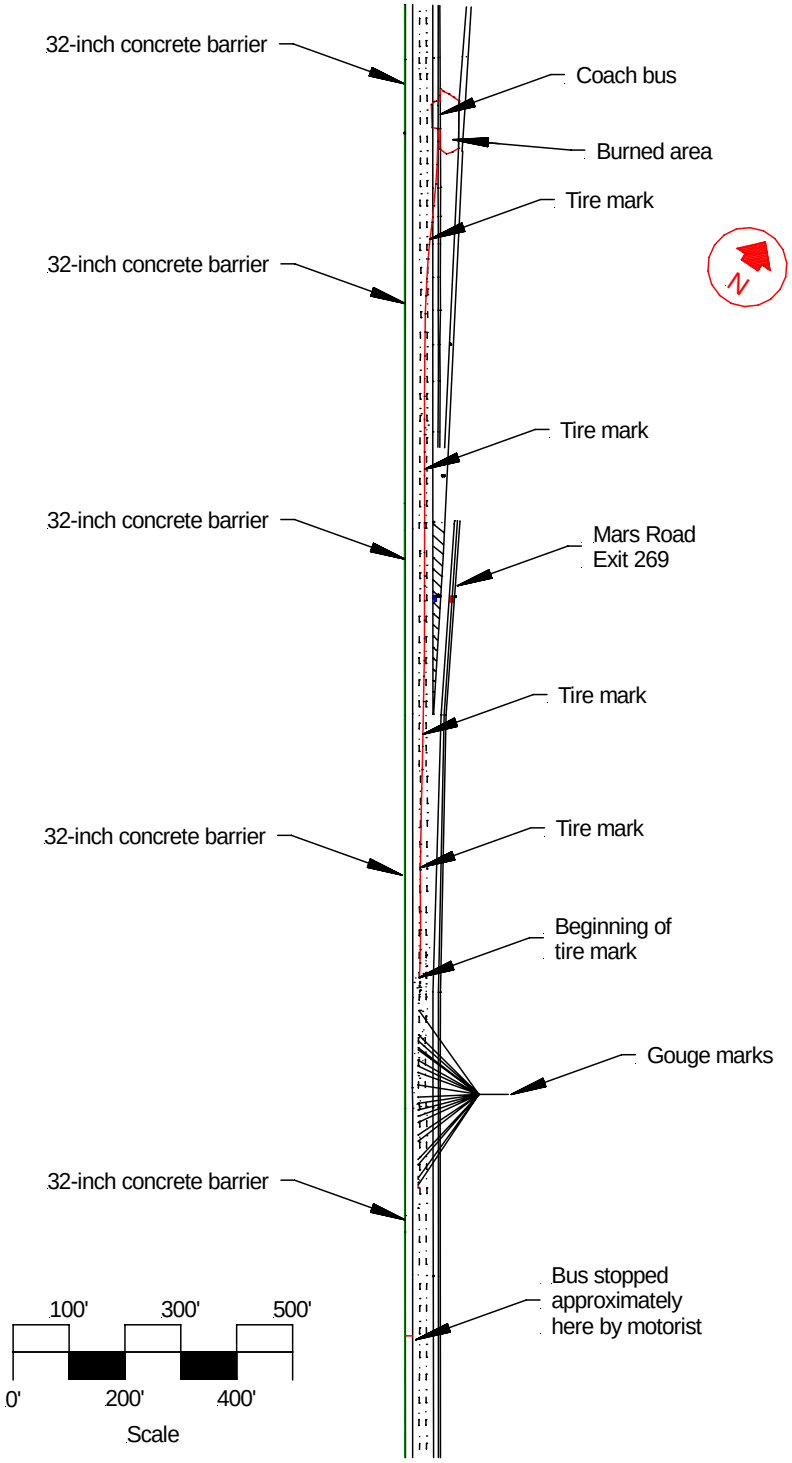

Figure 2 – NTSB map of accident scene.

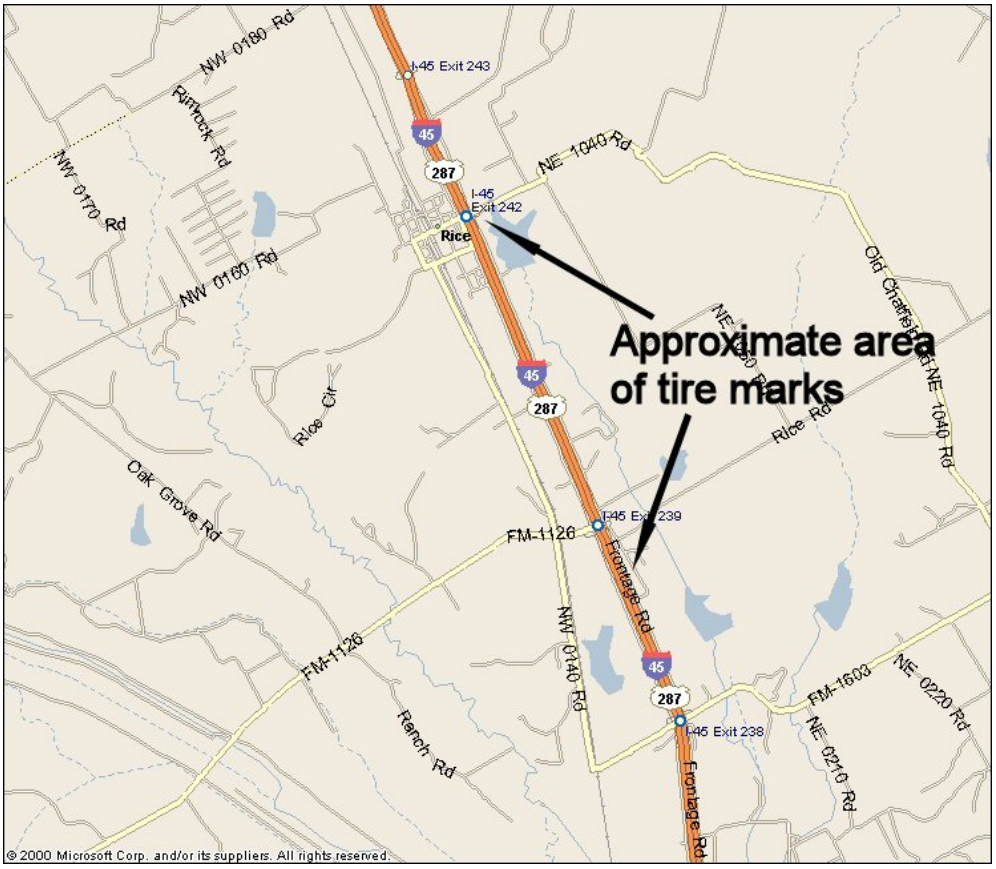

Figure – 3, map of I-45 and accident vicinity of flat tire.

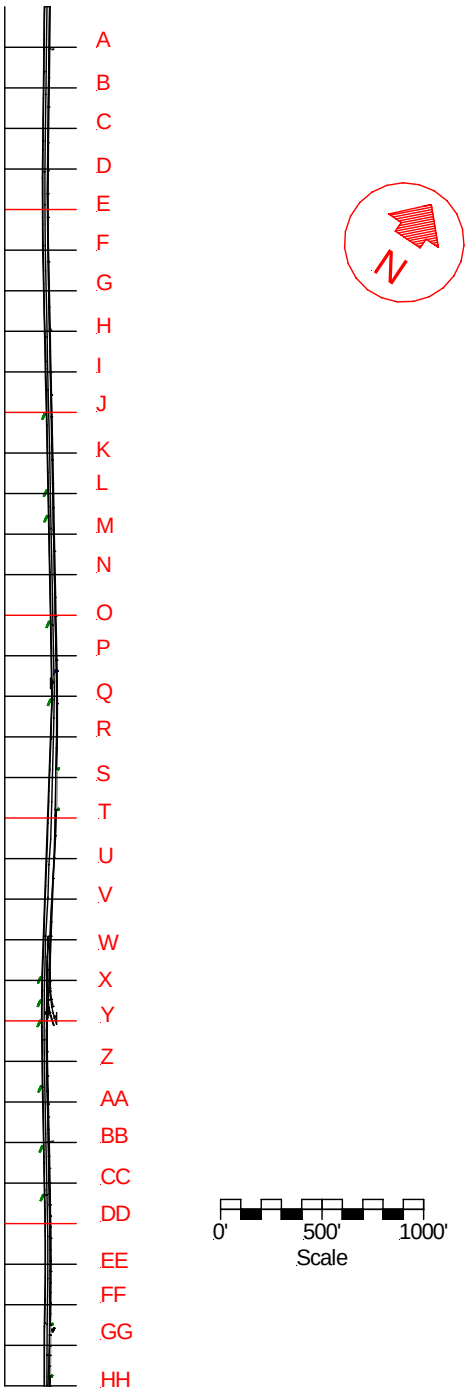

Figure 4 – NTSB (Key) map of the first location for flat tire repair.

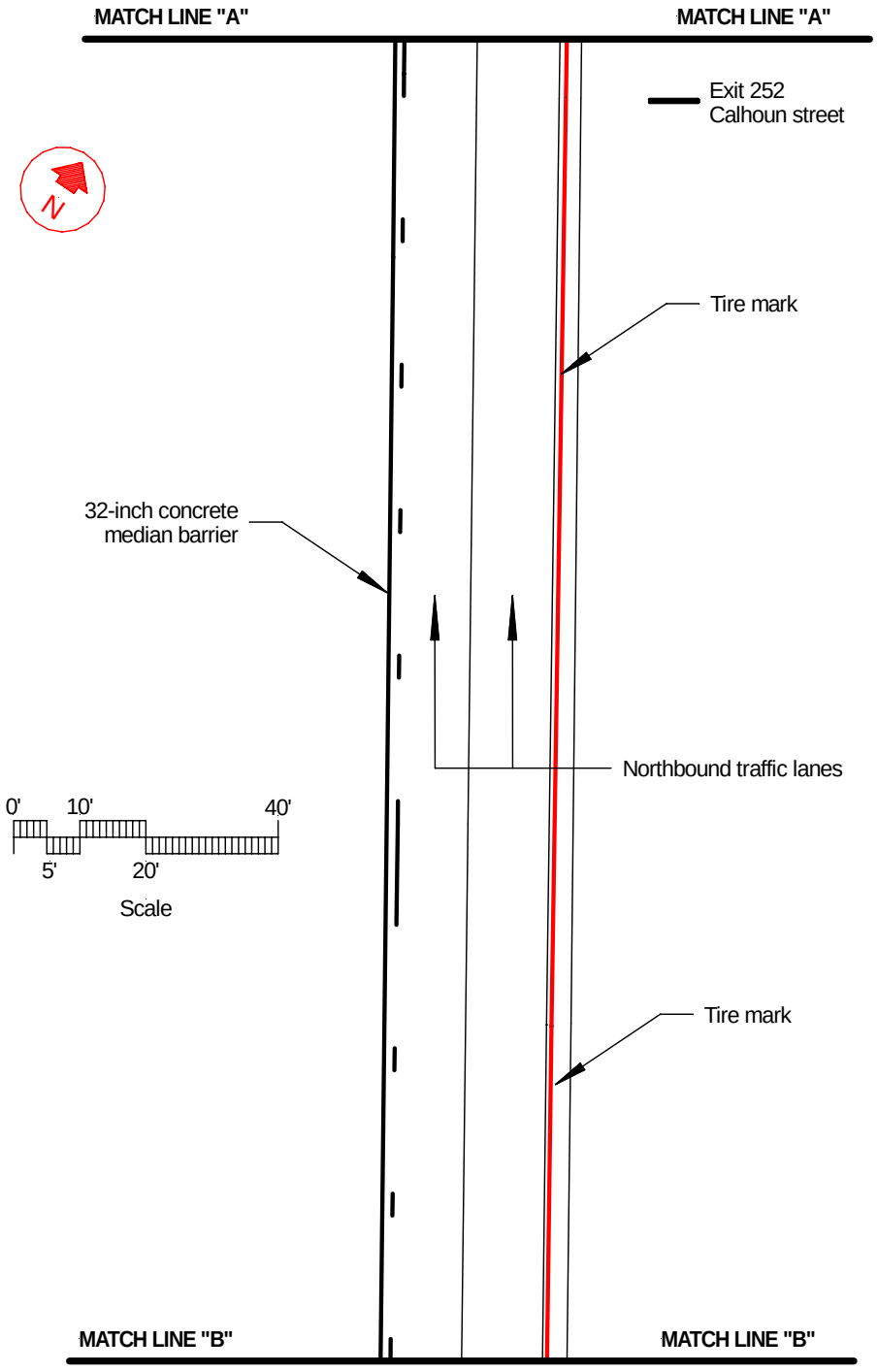

Figure 5 – NTSB map of A-B pavement markings and roadway evidence.

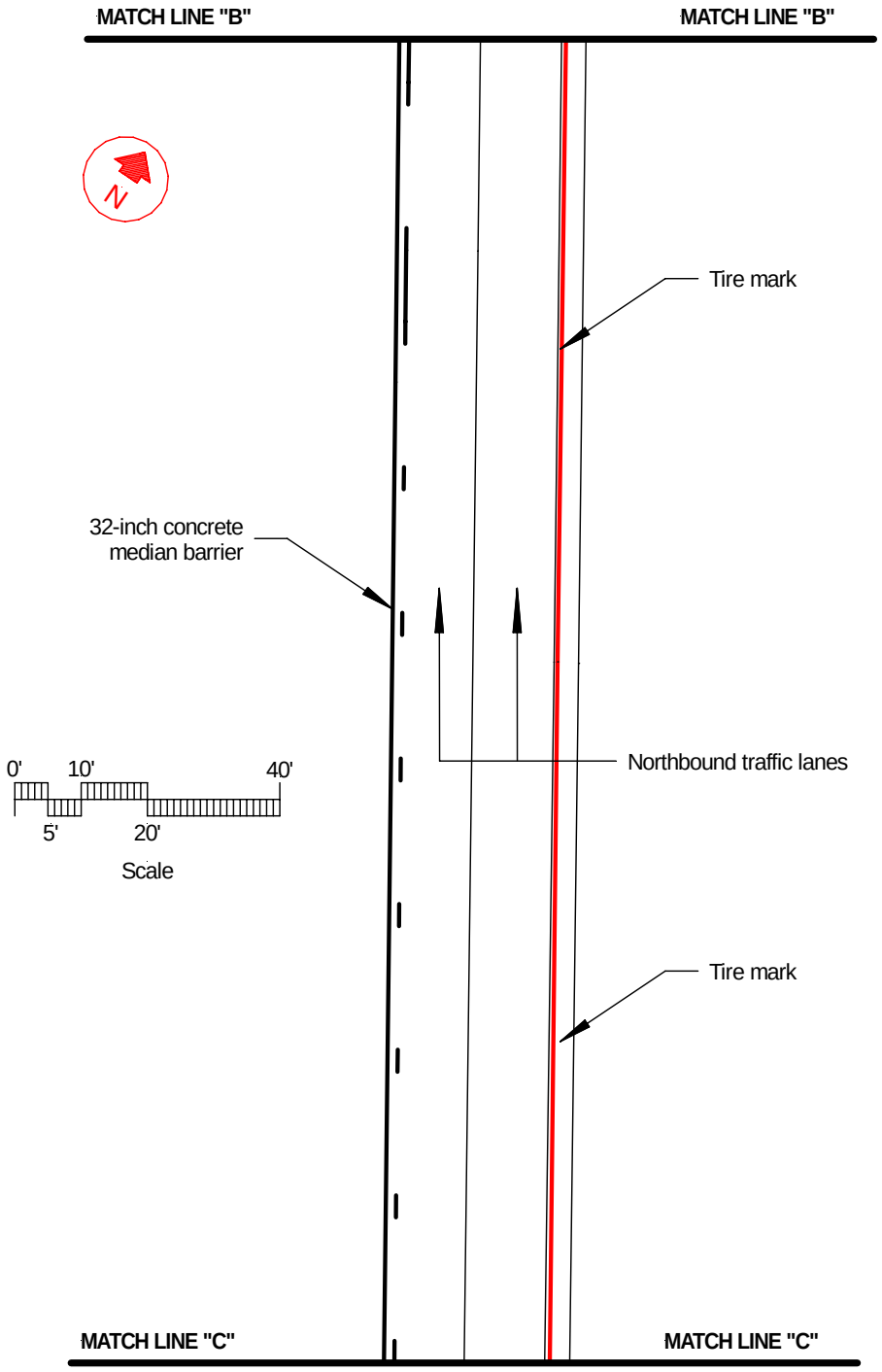

Figure 6 – NTSB map of B-C pavement markings and roadway evidence.

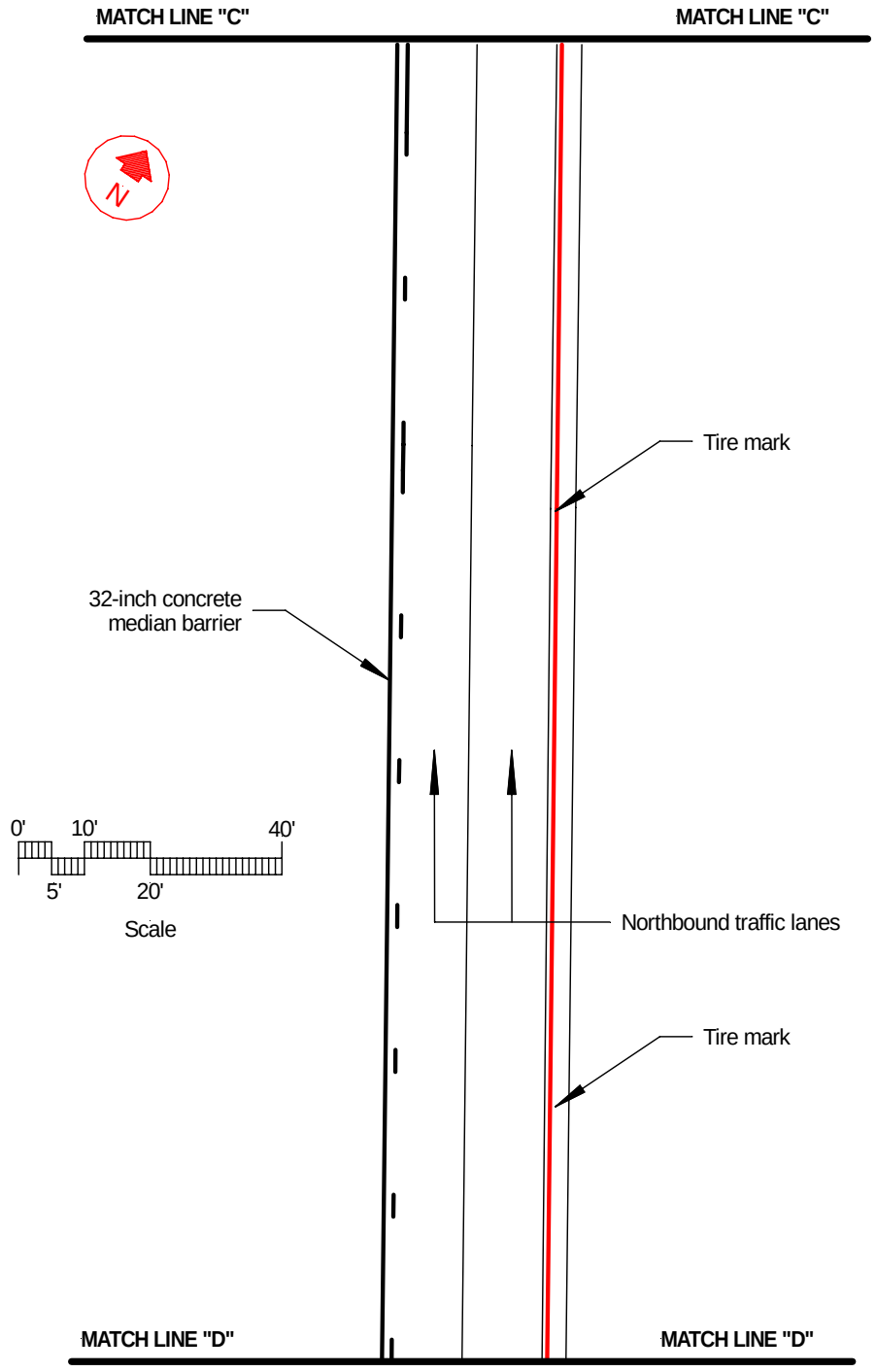

Figure 7 – NTSB map of C-D pavement markings and roadway evidence.

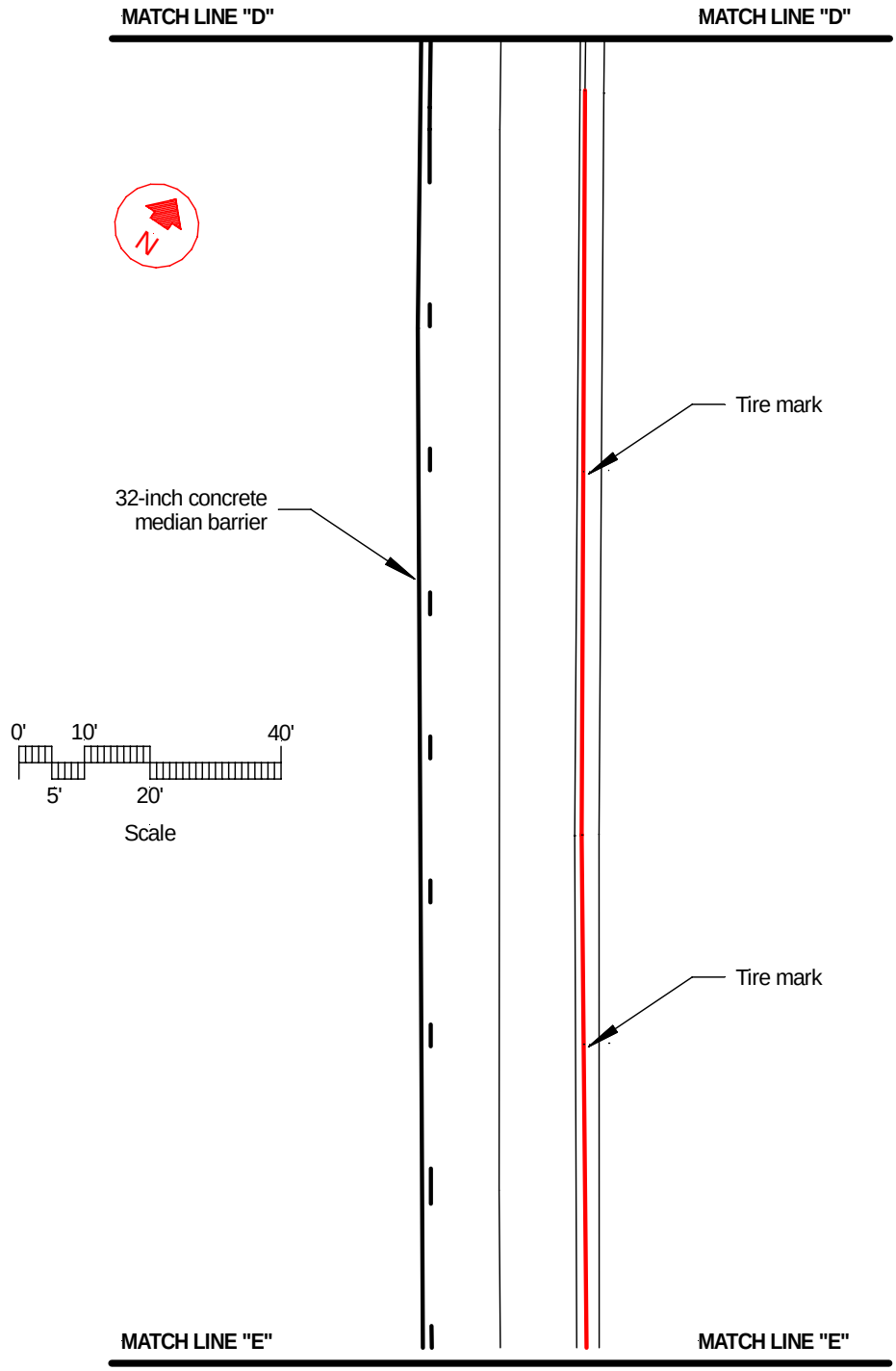

Figure 8 – NTSB map of D-E pavement markings and roadway evidence.

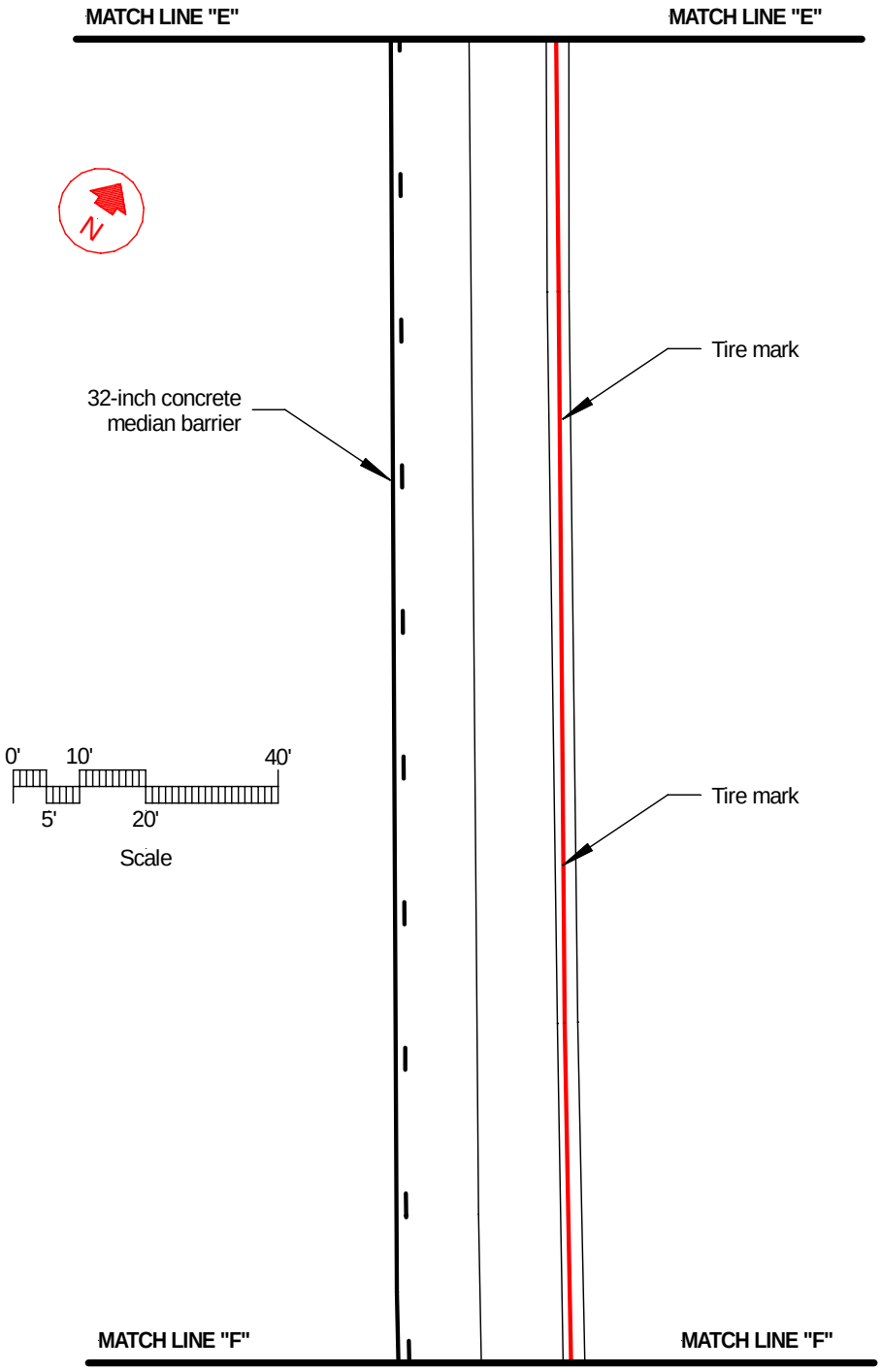

Figure 9 – NTSB map of E-F pavement markings and roadway evidence.

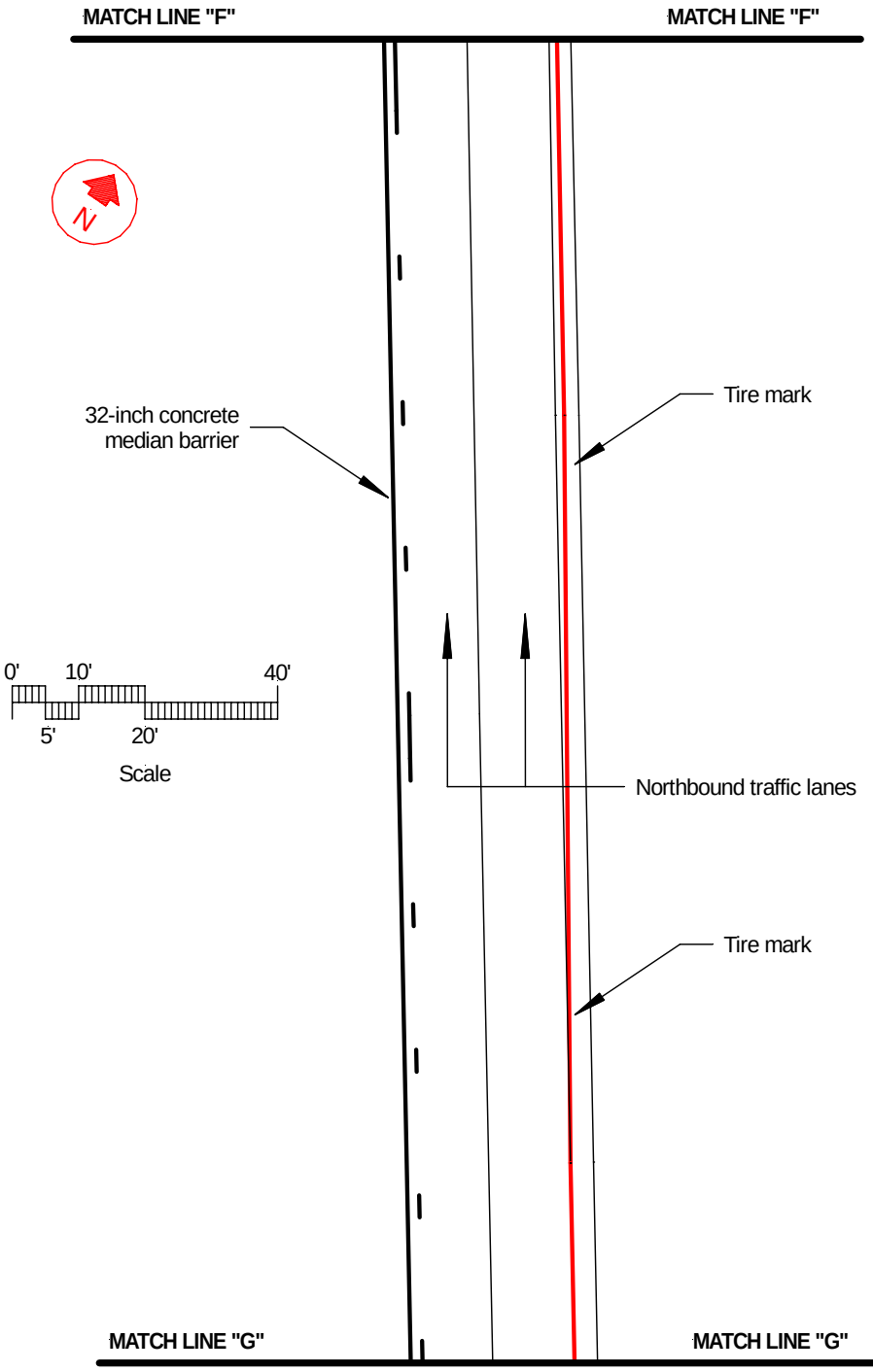

Figure 10 – NTSB map of F-G pavement markings and roadway evidence.

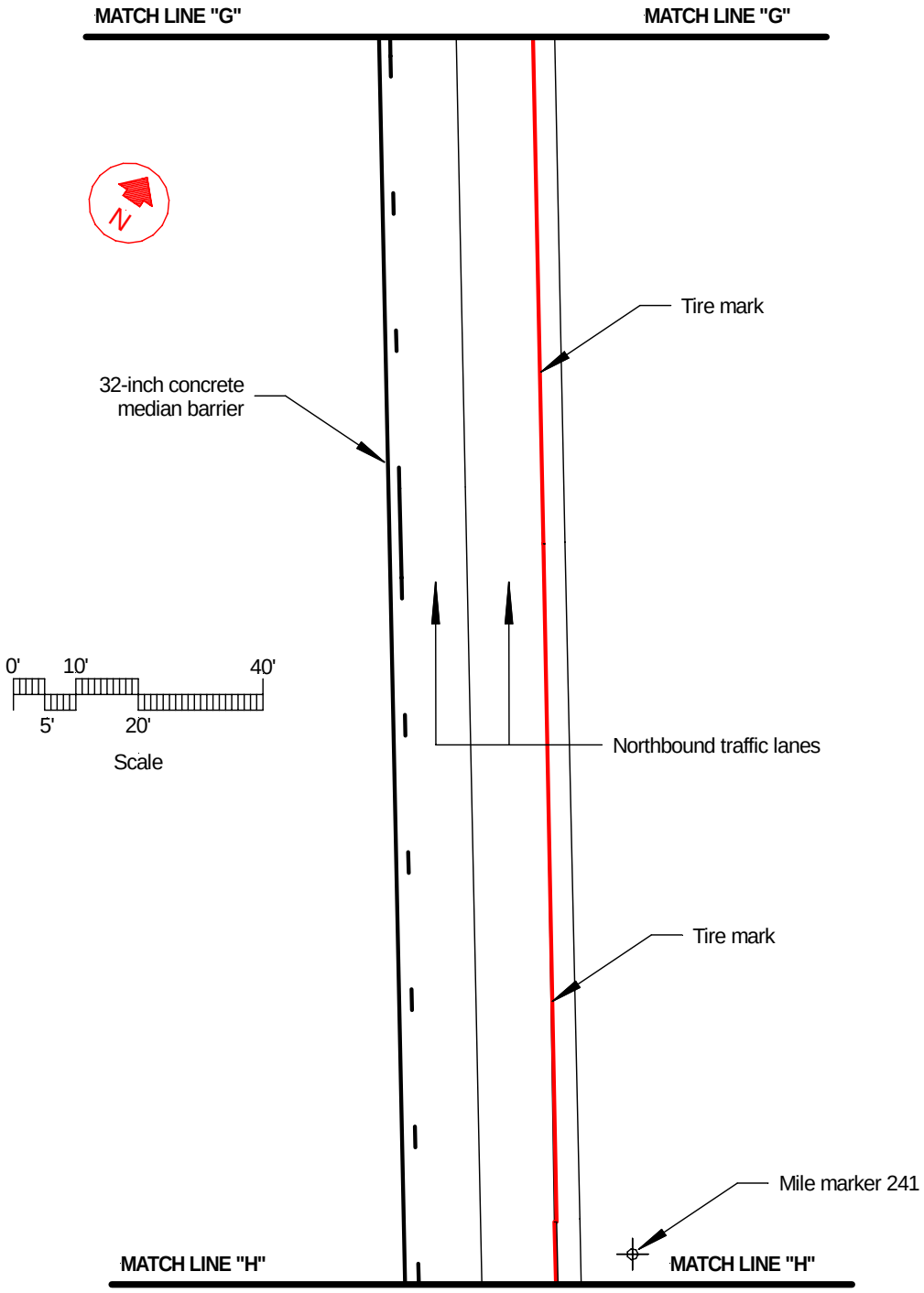

Figure 11 – NTSB map of G-H pavement markings and roadway evidence.

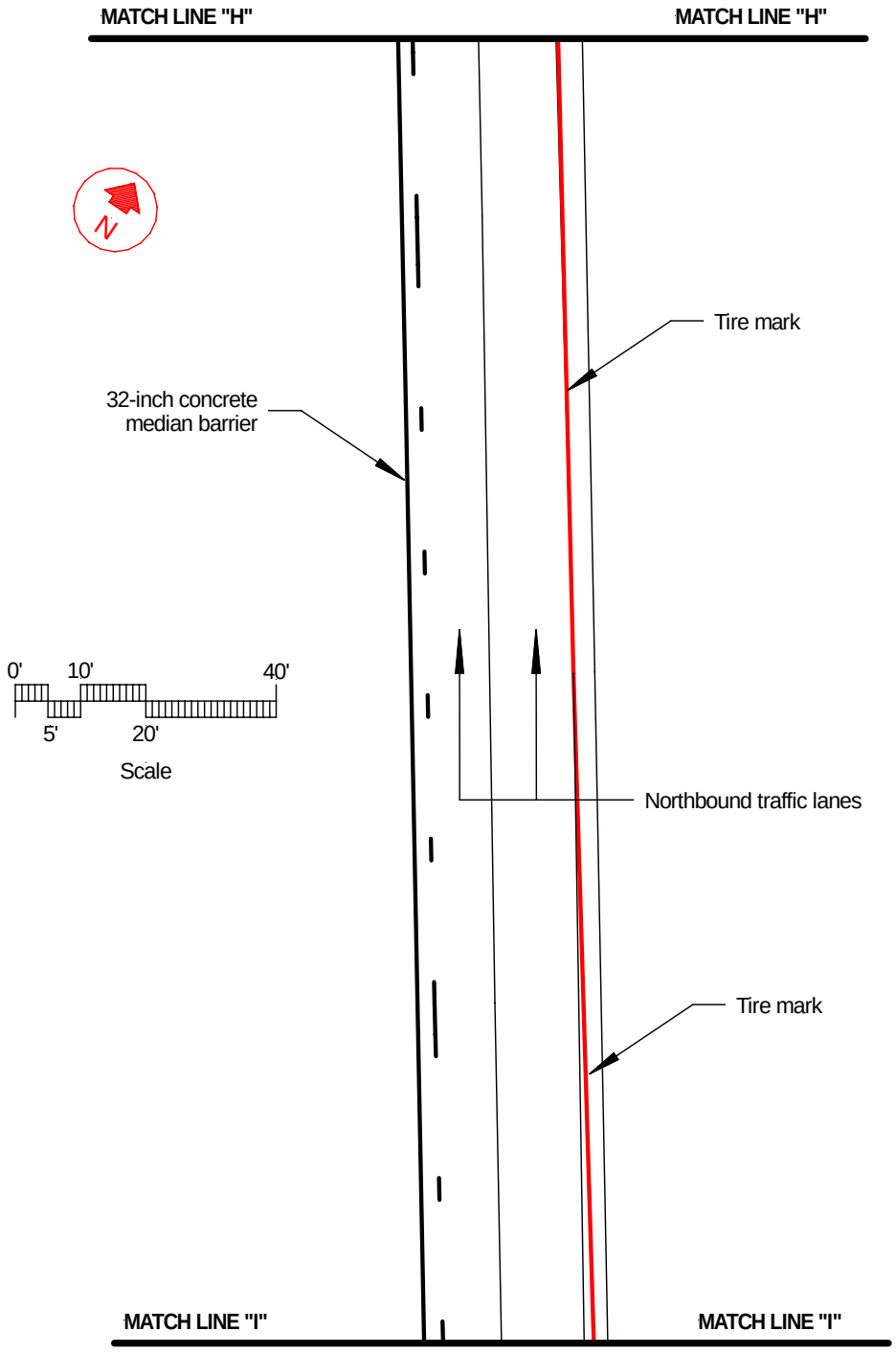

Figure 12 – NTSB map of H-I pavement markings and roadway evidence.

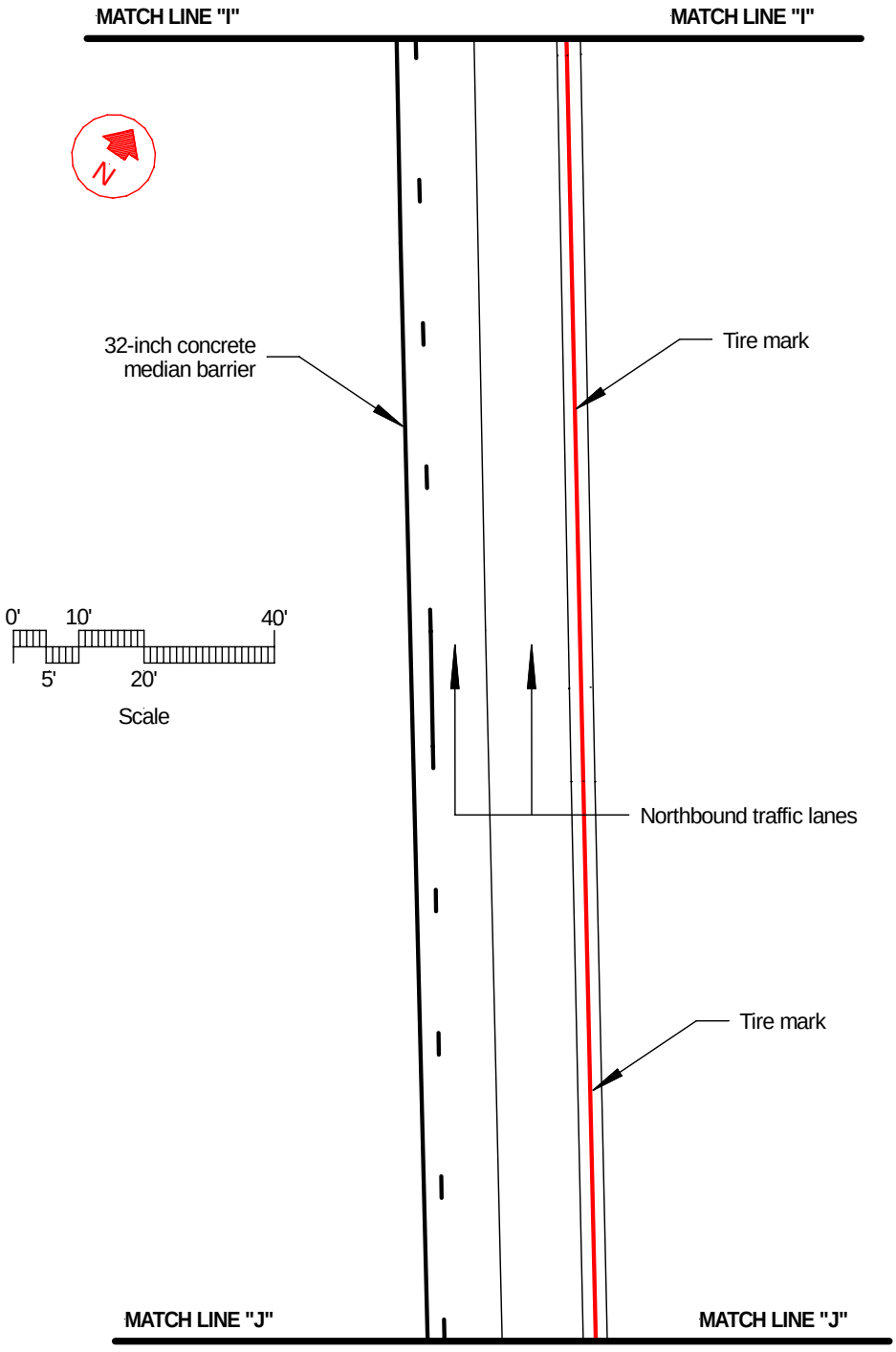

Figure 13 – NTSB map of I-J pavement markings and roadway evidence.

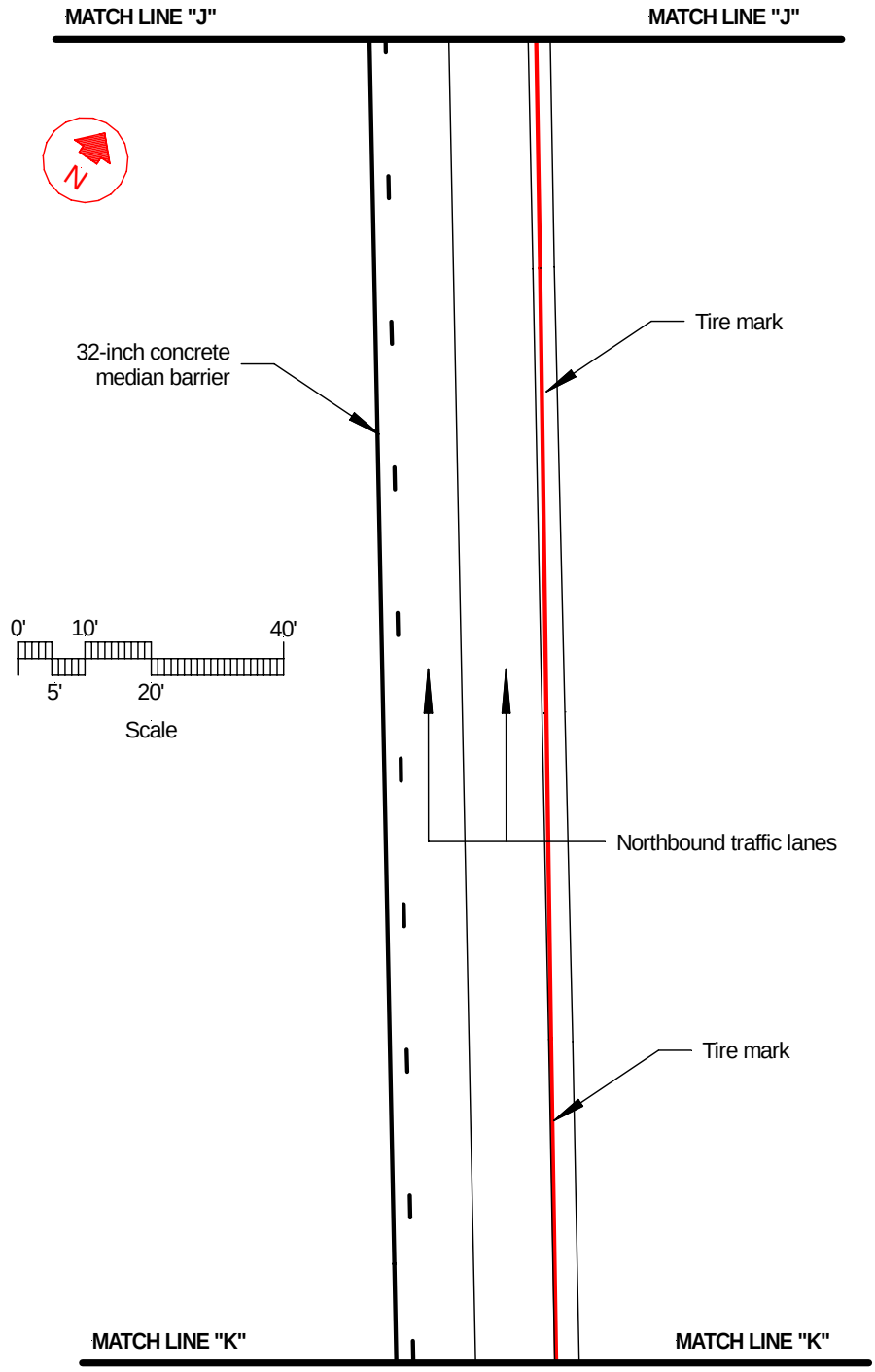

Figure 14 – NTSB map of J-K pavement markings and roadway evidence.

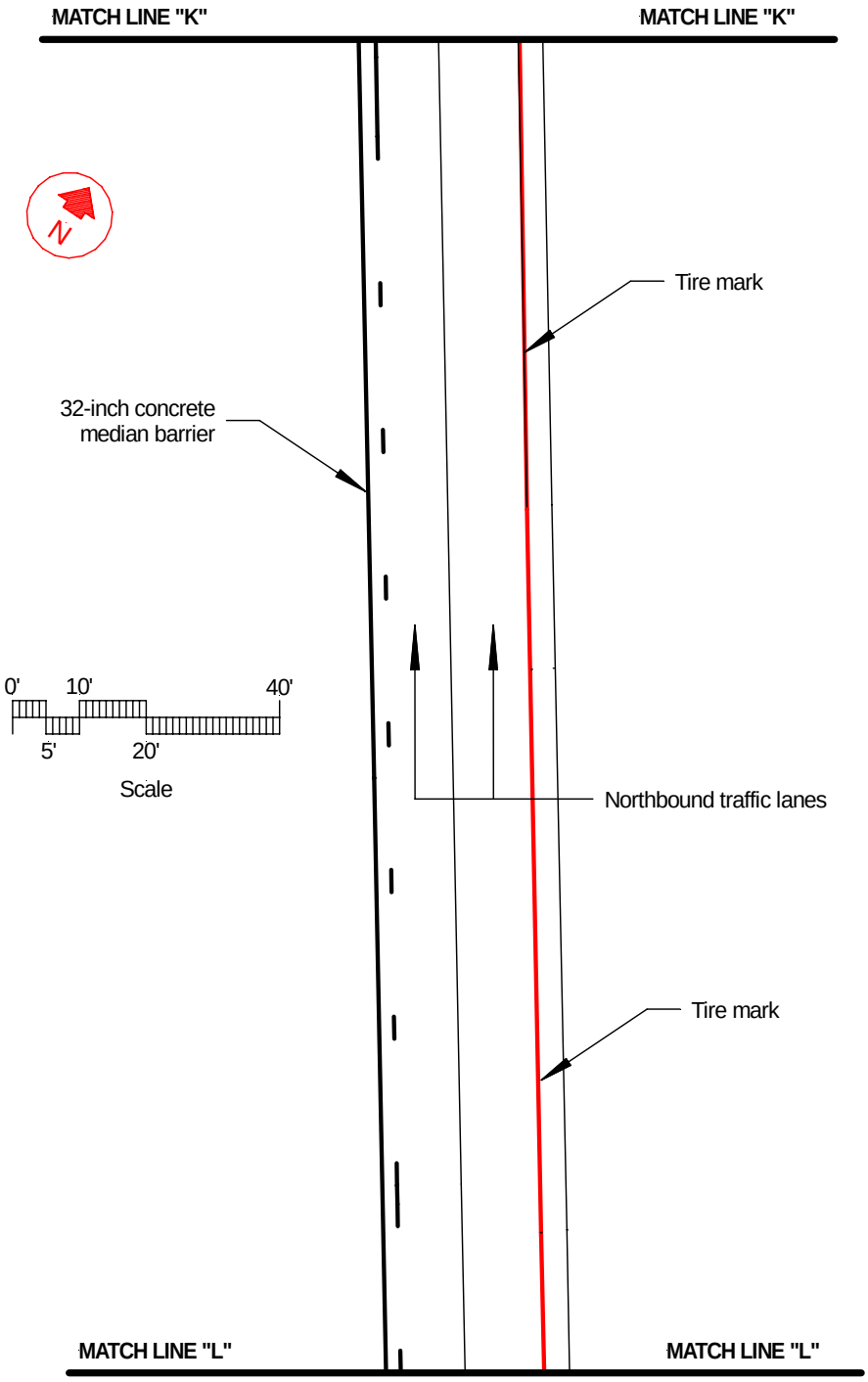

Figure 15 – NTSB map of K-L pavement markings and roadway evidence.

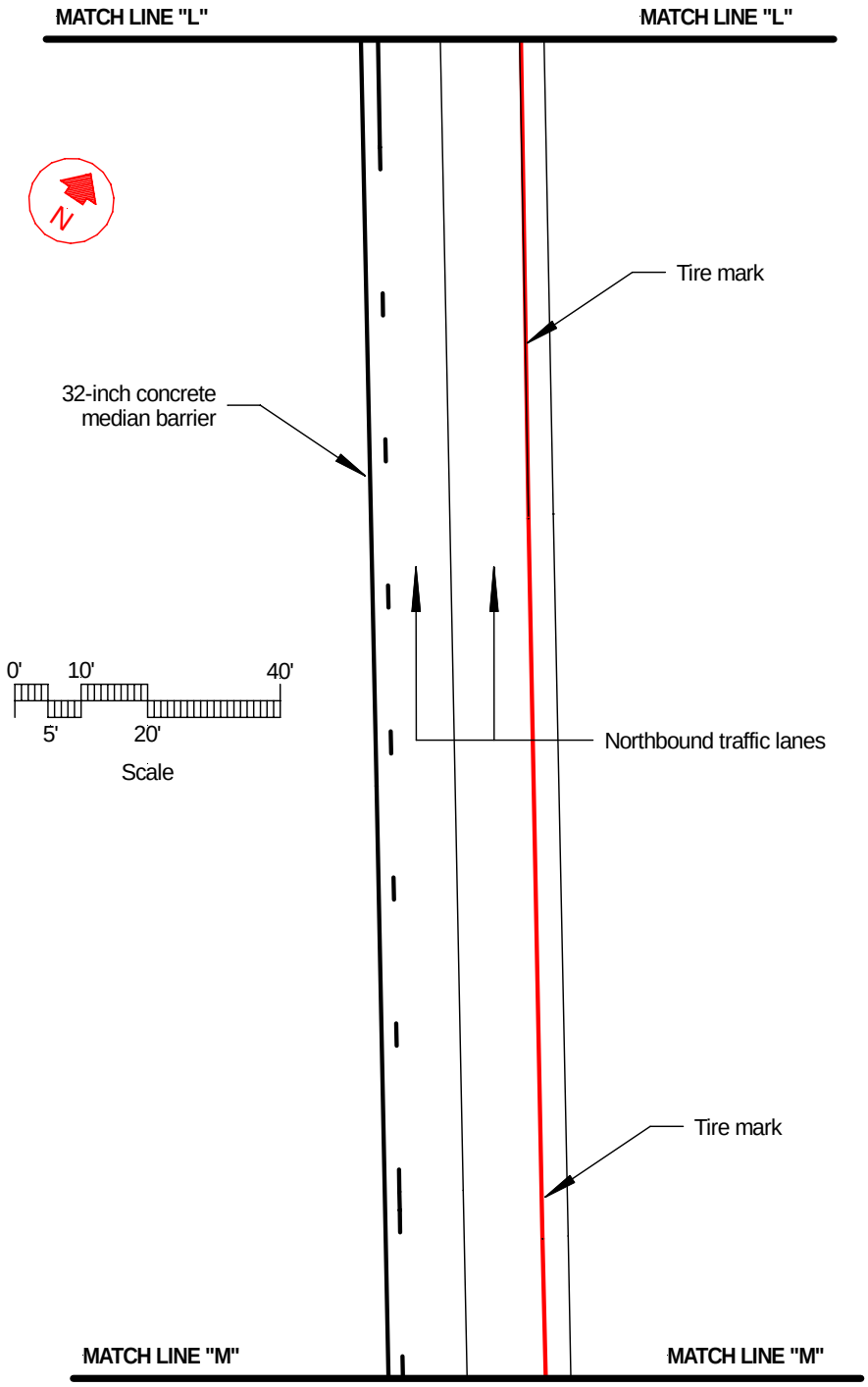

Figure 16 – NTSB map of L-M pavement markings and roadway evidence.

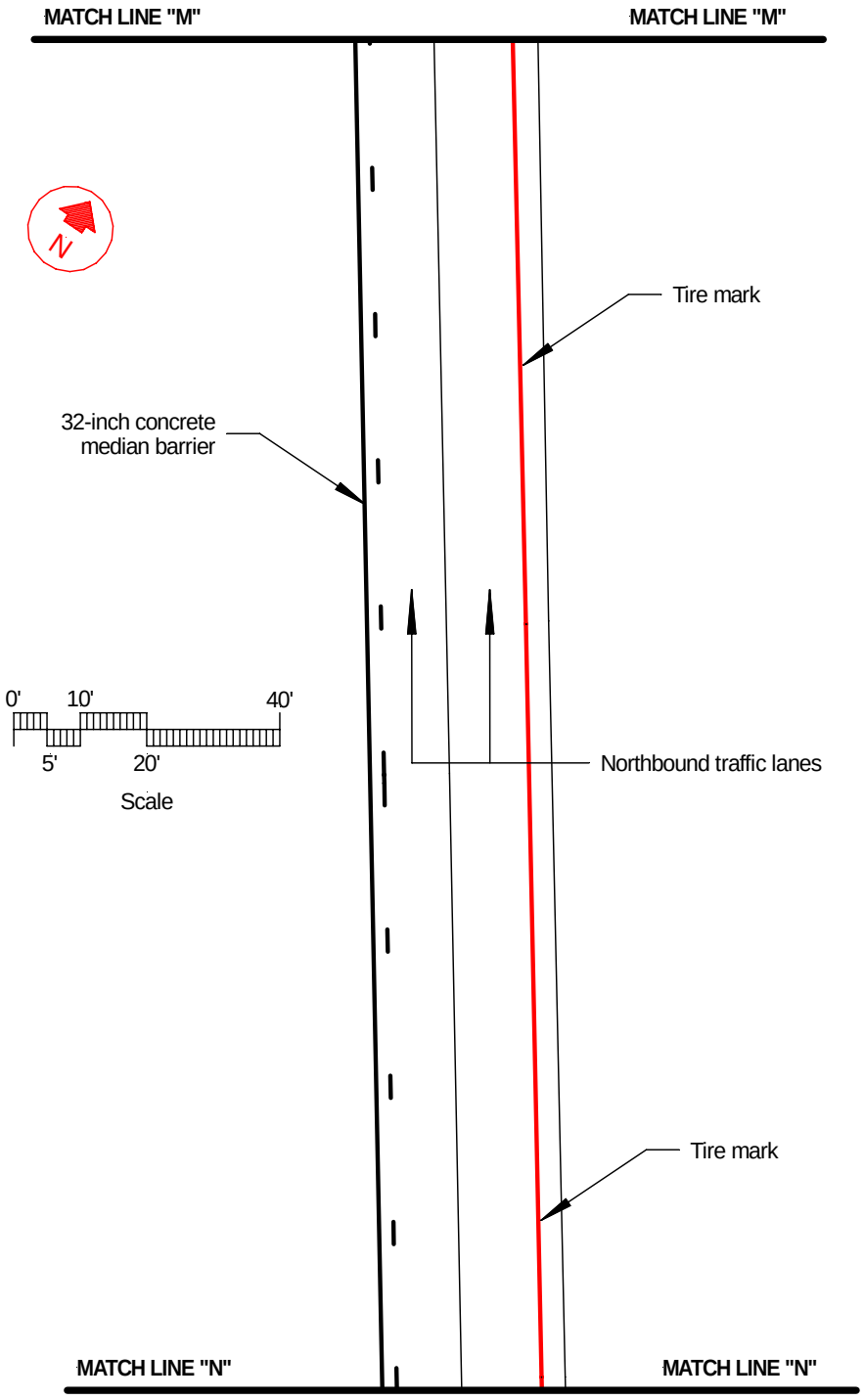

Figure 17 – NTSB map of M-N pavement markings and roadway evidence.

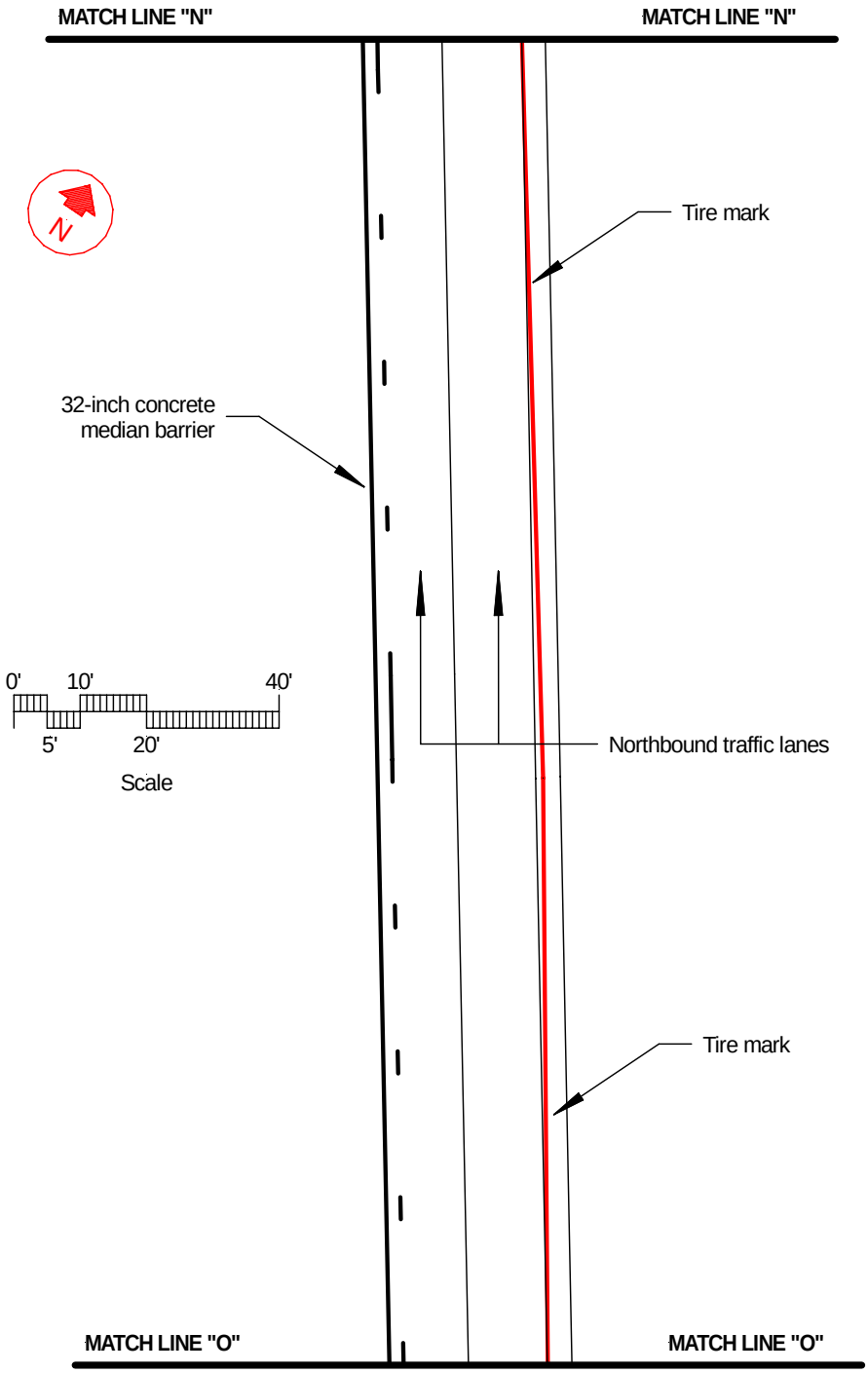

Figure 18 – NTSB map of N-O pavement markings and roadway evidence.

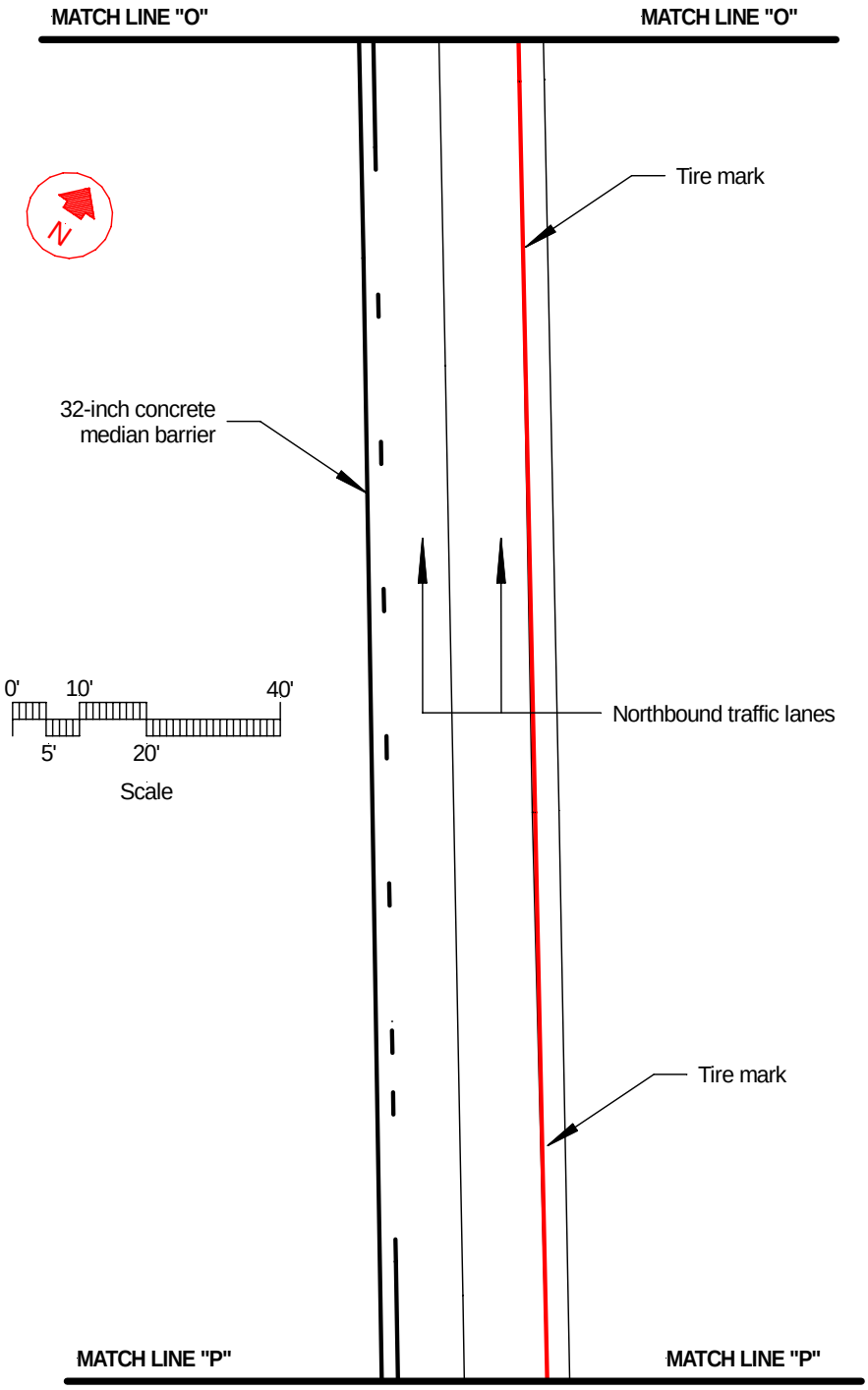

Figure 19 – NTSB map of O-P pavement markings and roadway evidence.

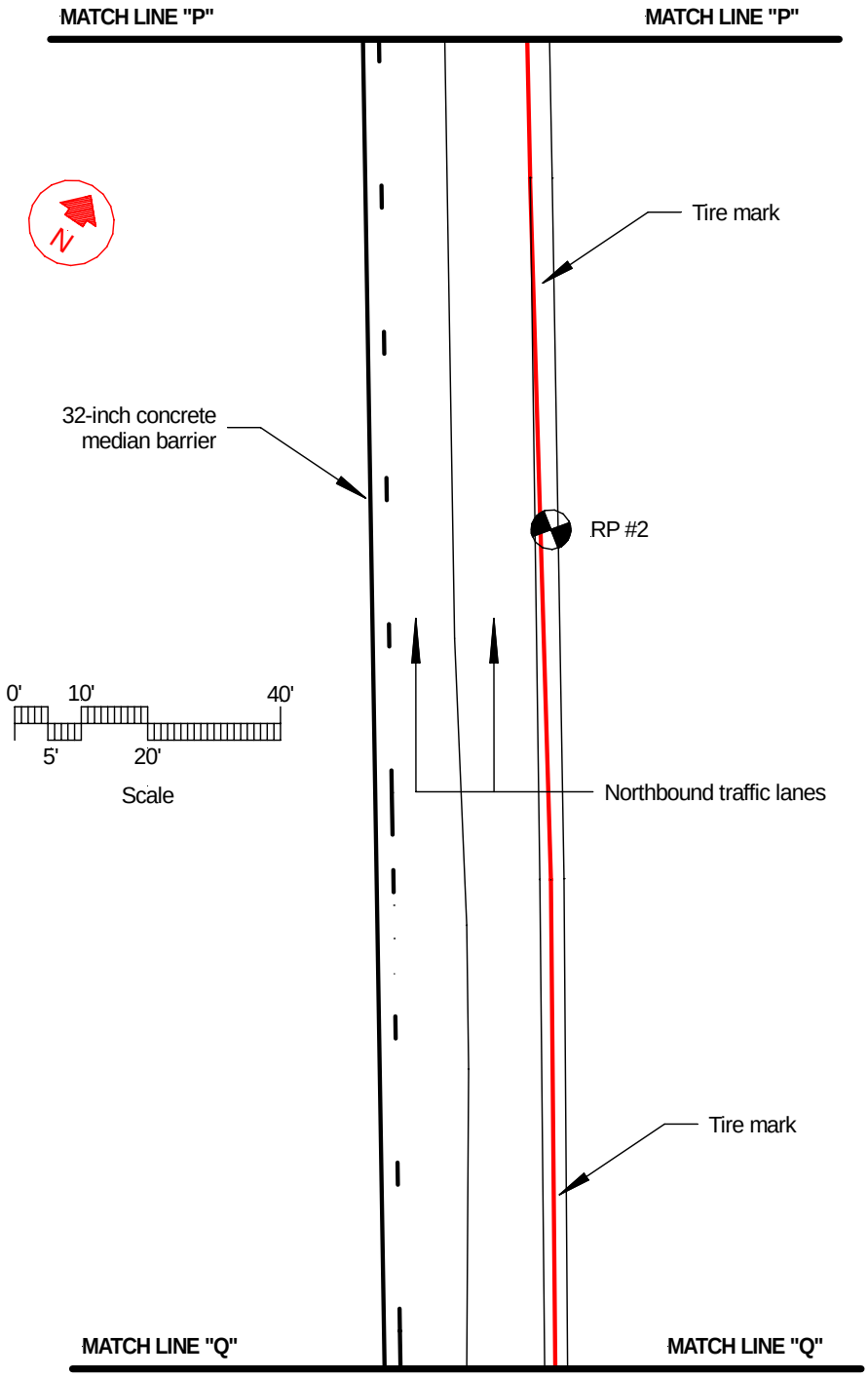

Figure 20 – NTSB map of P-Q pavement markings and roadway evidence.

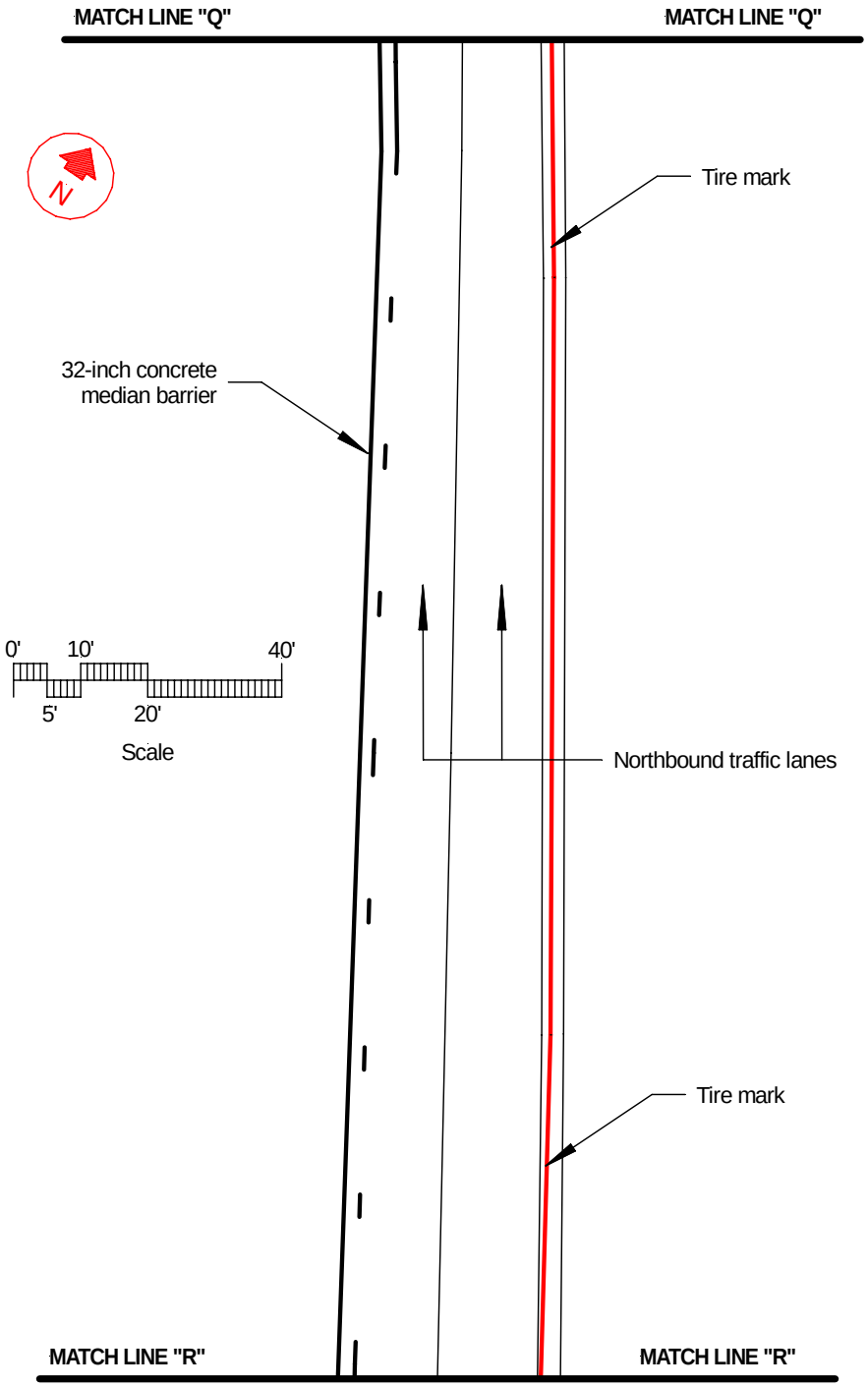

Figure 21 – NTSB map of Q-R pavement markings and roadway evidence.

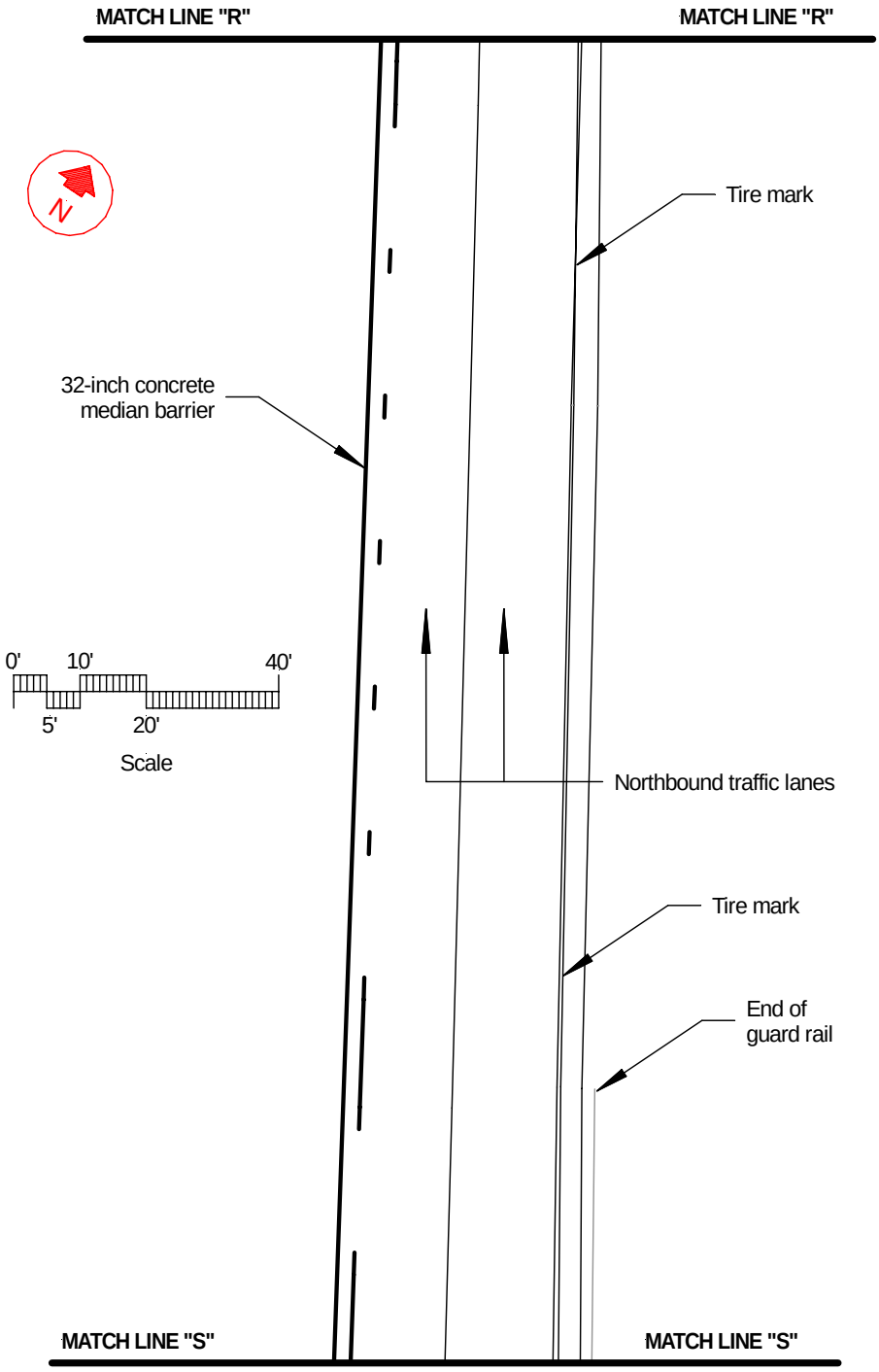

Figure 22 – NTSB map of R-S pavement markings and roadway evidence.

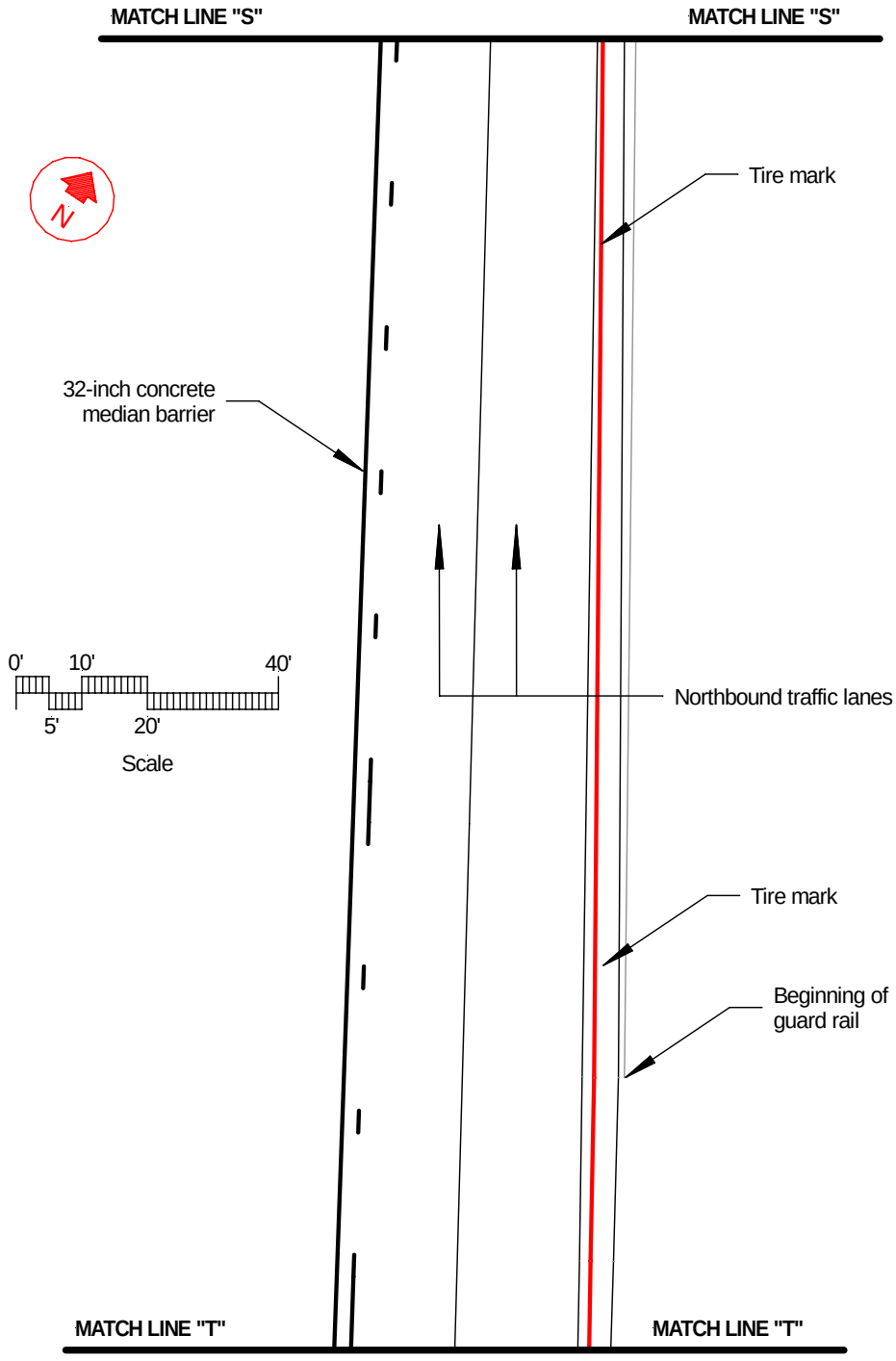

Figure 23 – NTSB map of S-T pavement markings and roadway evidence.

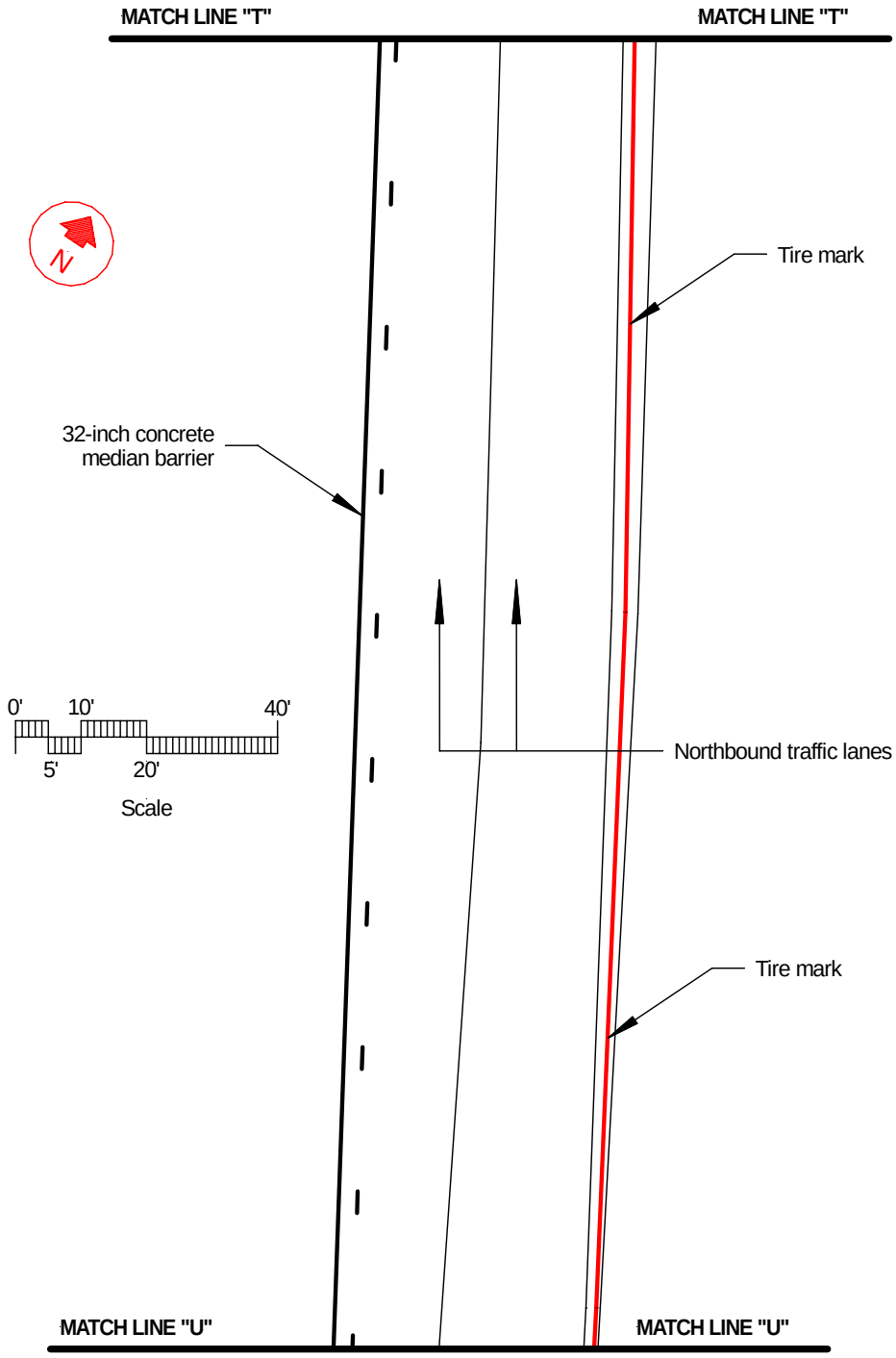

Figure 24 – NTSB map of T-U pavement markings and roadway evidence.

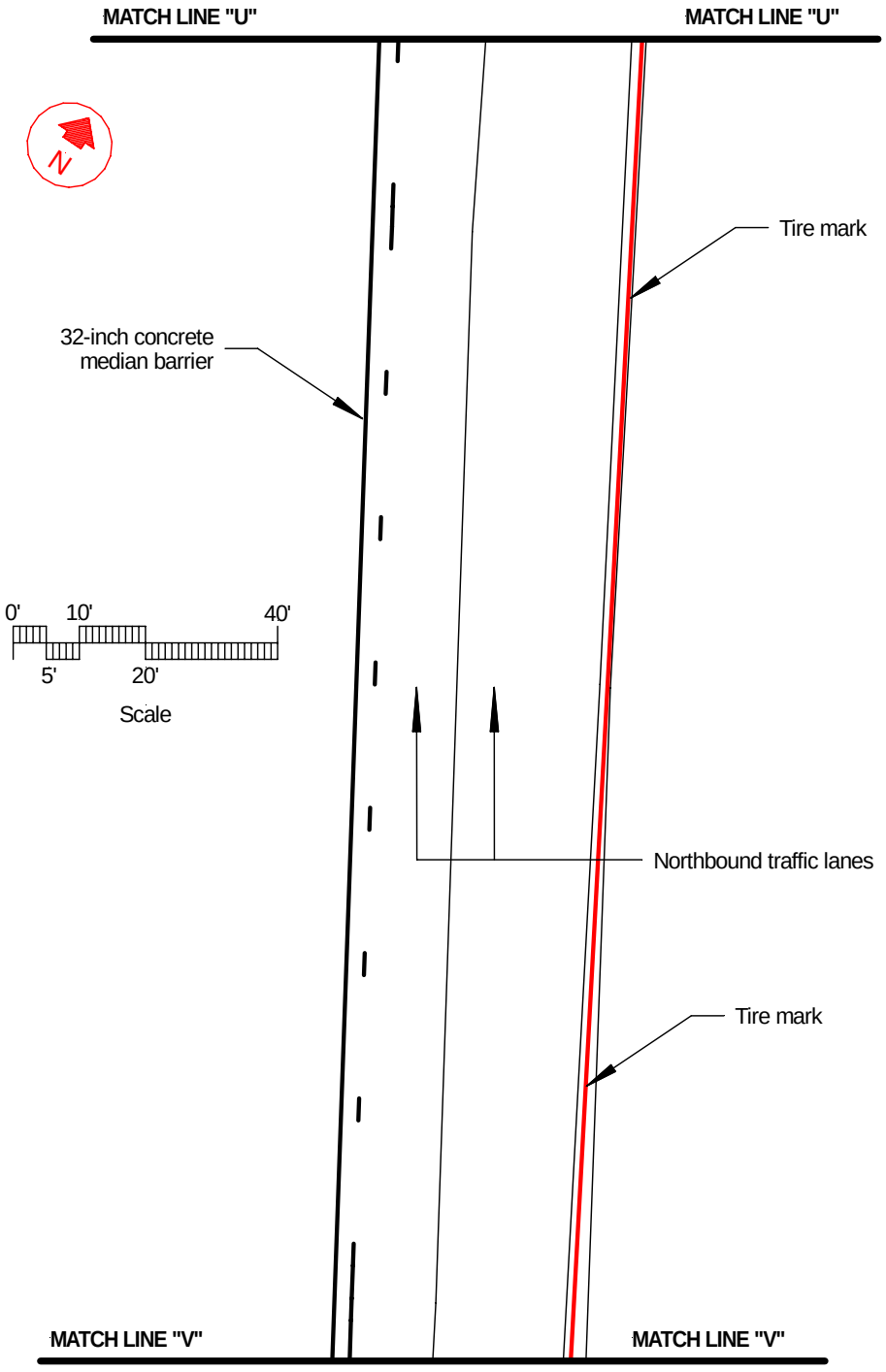

Figure 25 – NTSB map of U-V pavement markings and roadway evidence.

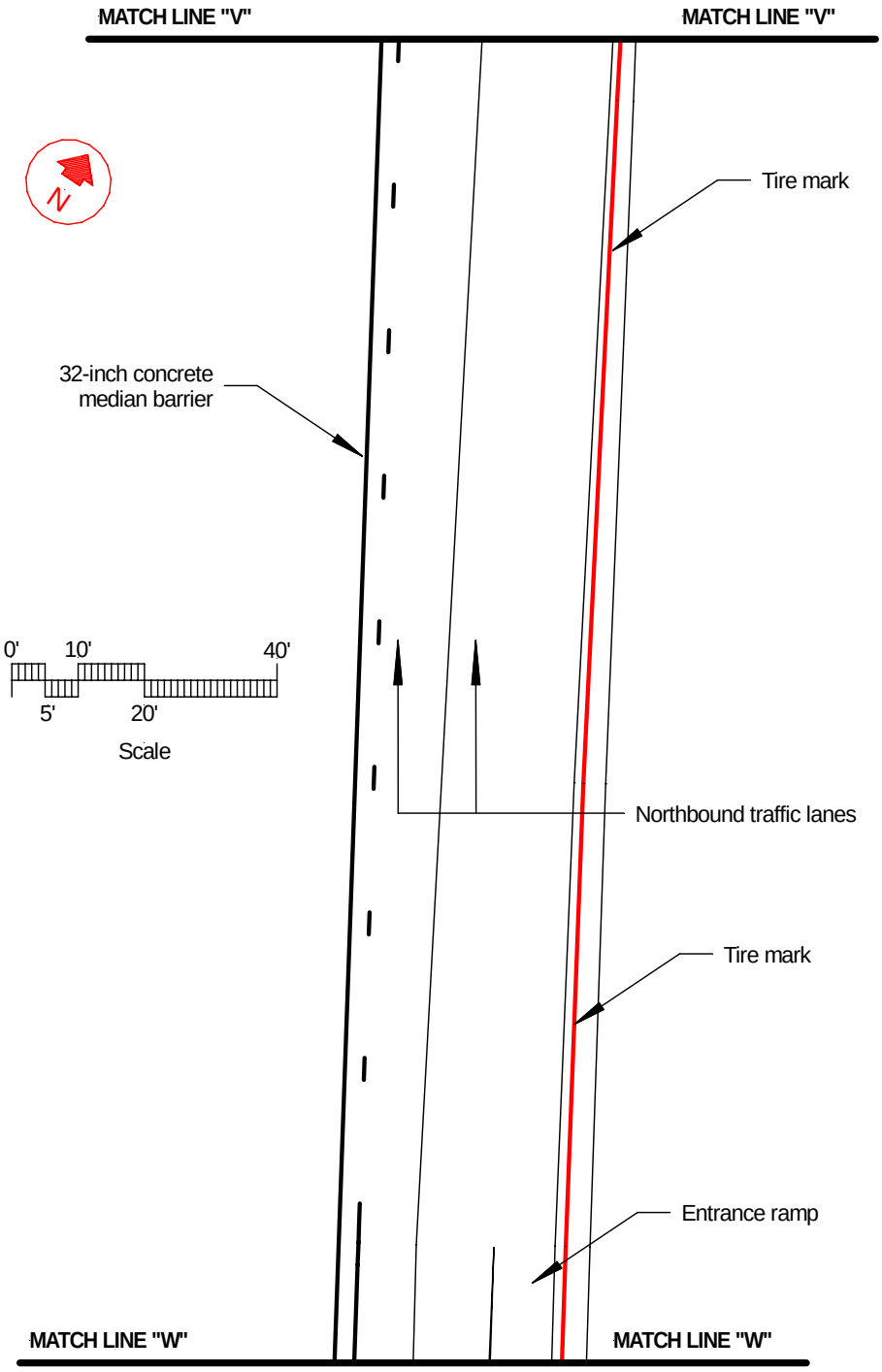

Figure 26 – NTSB map of V-W pavement markings and roadway evidence.

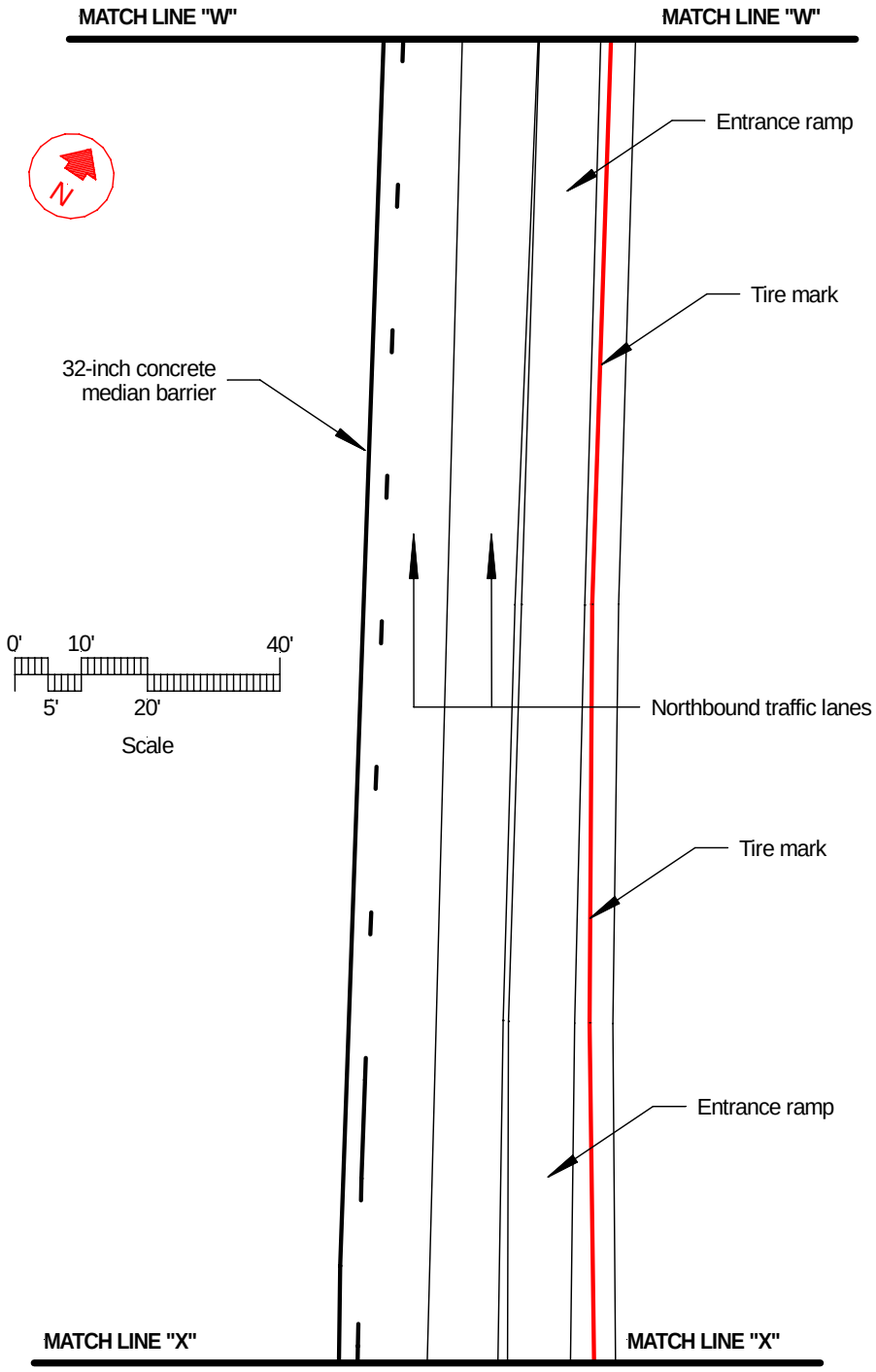

Figure 27 – NTSB map of W-X pavement markings and roadway evidence.

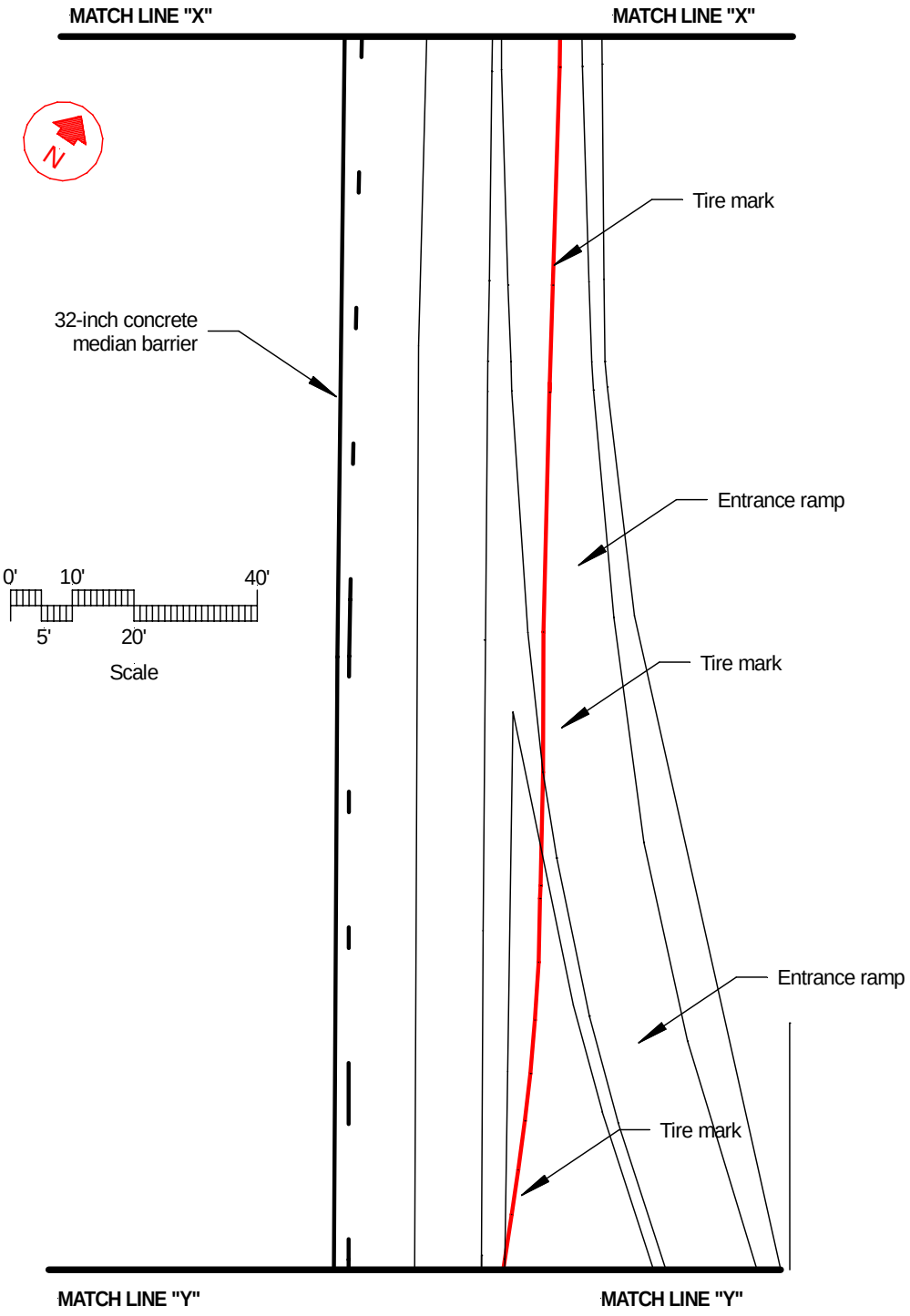

Figure 28 – NTSB map of X-Y pavement markings and roadway evidence.

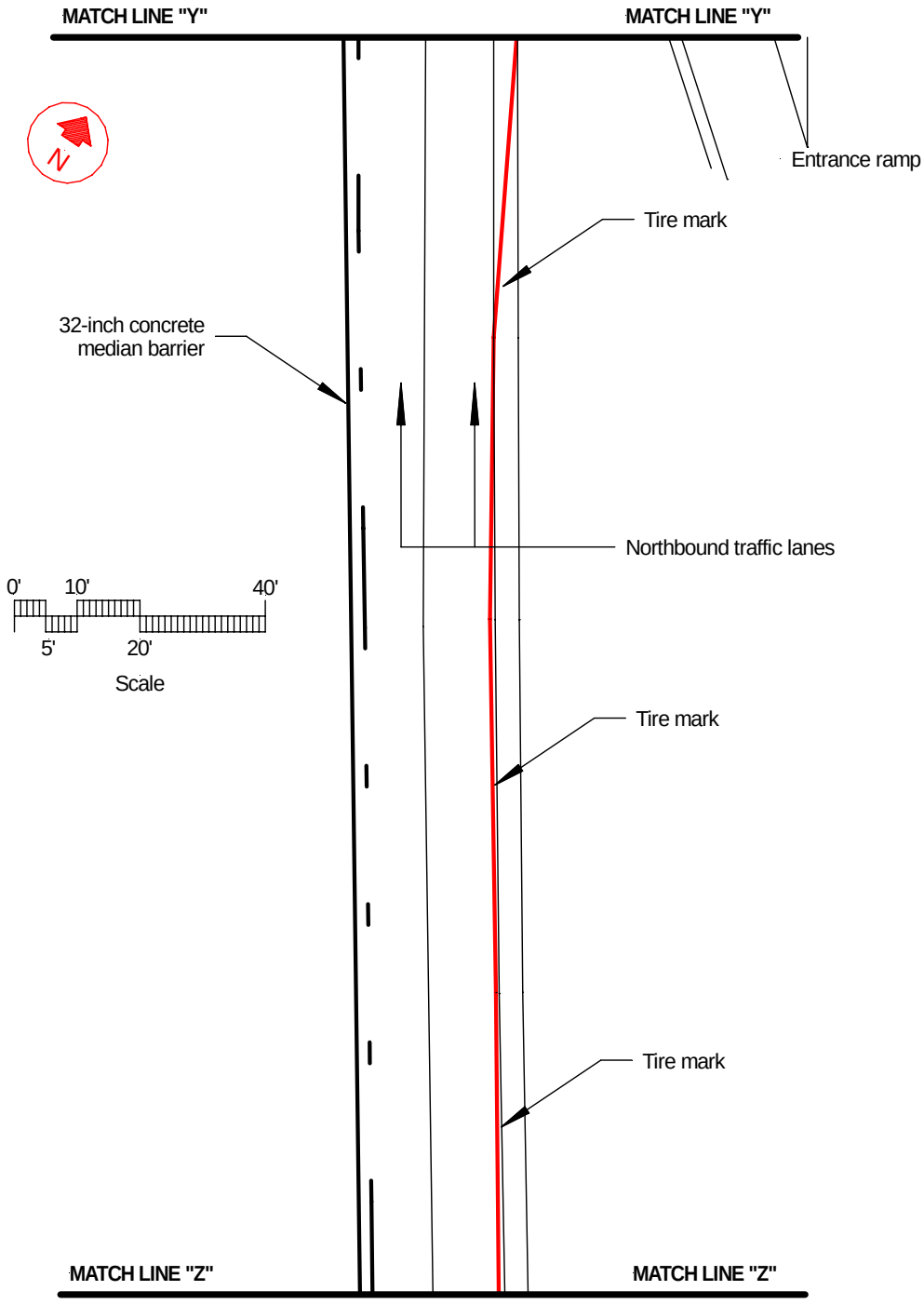

Figure 29 – NTSB map of Y-Z pavement markings and roadway evidence.

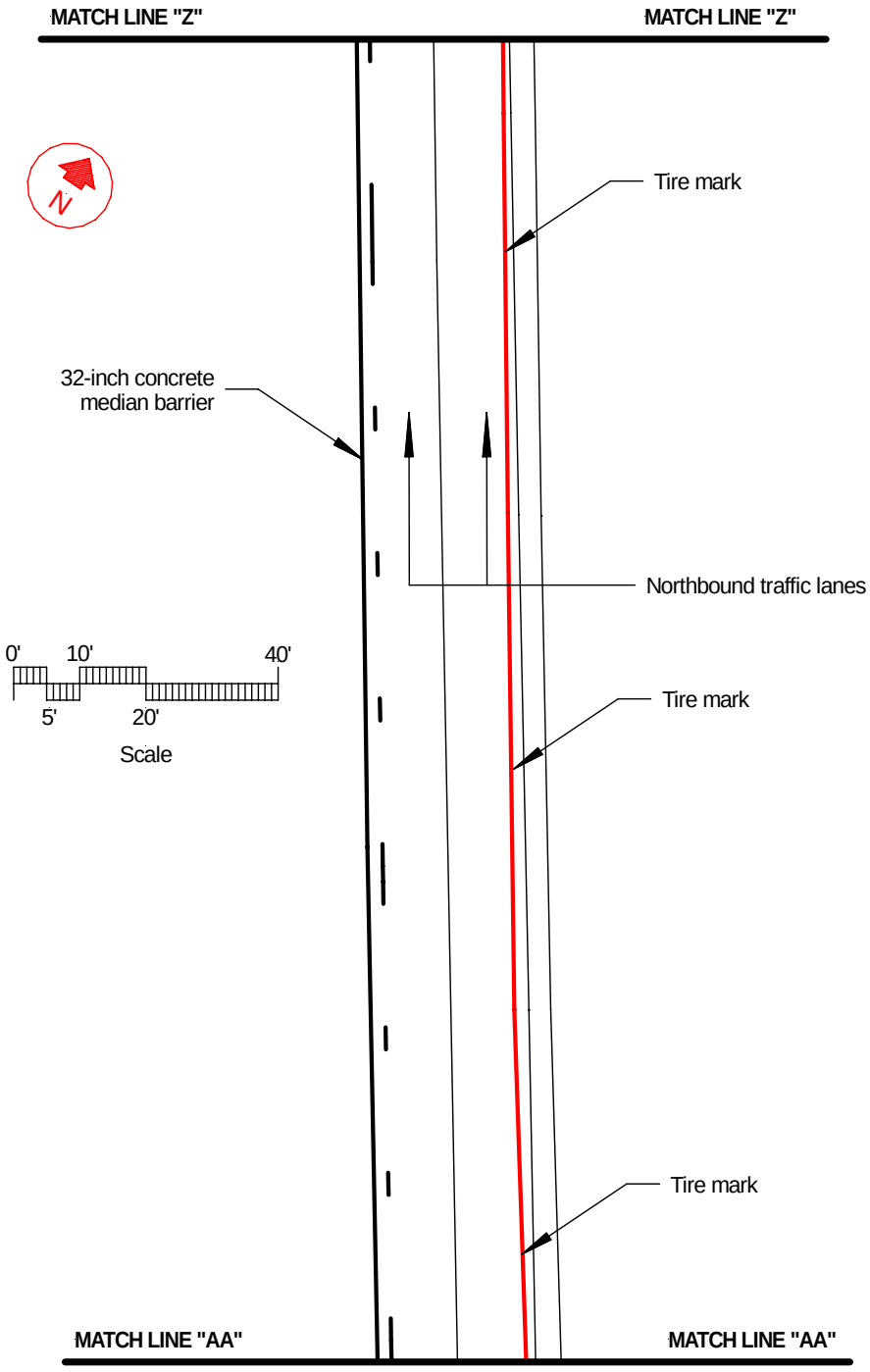

Figure 30 – NTSB map of Z-AA pavement markings and roadway evidence.

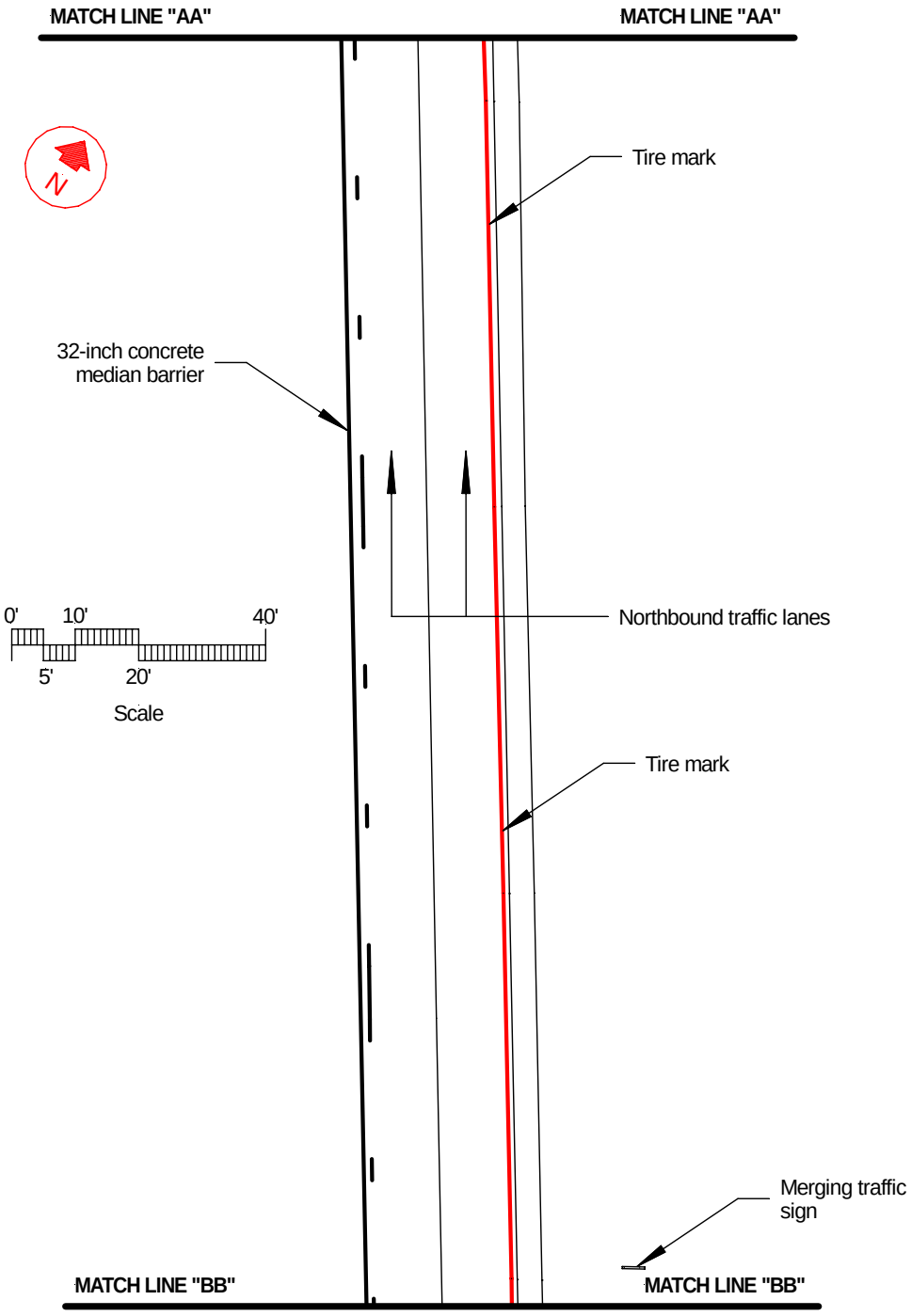

Figure 31 – NTSB map of AA-BB pavement markings and roadway evidence.

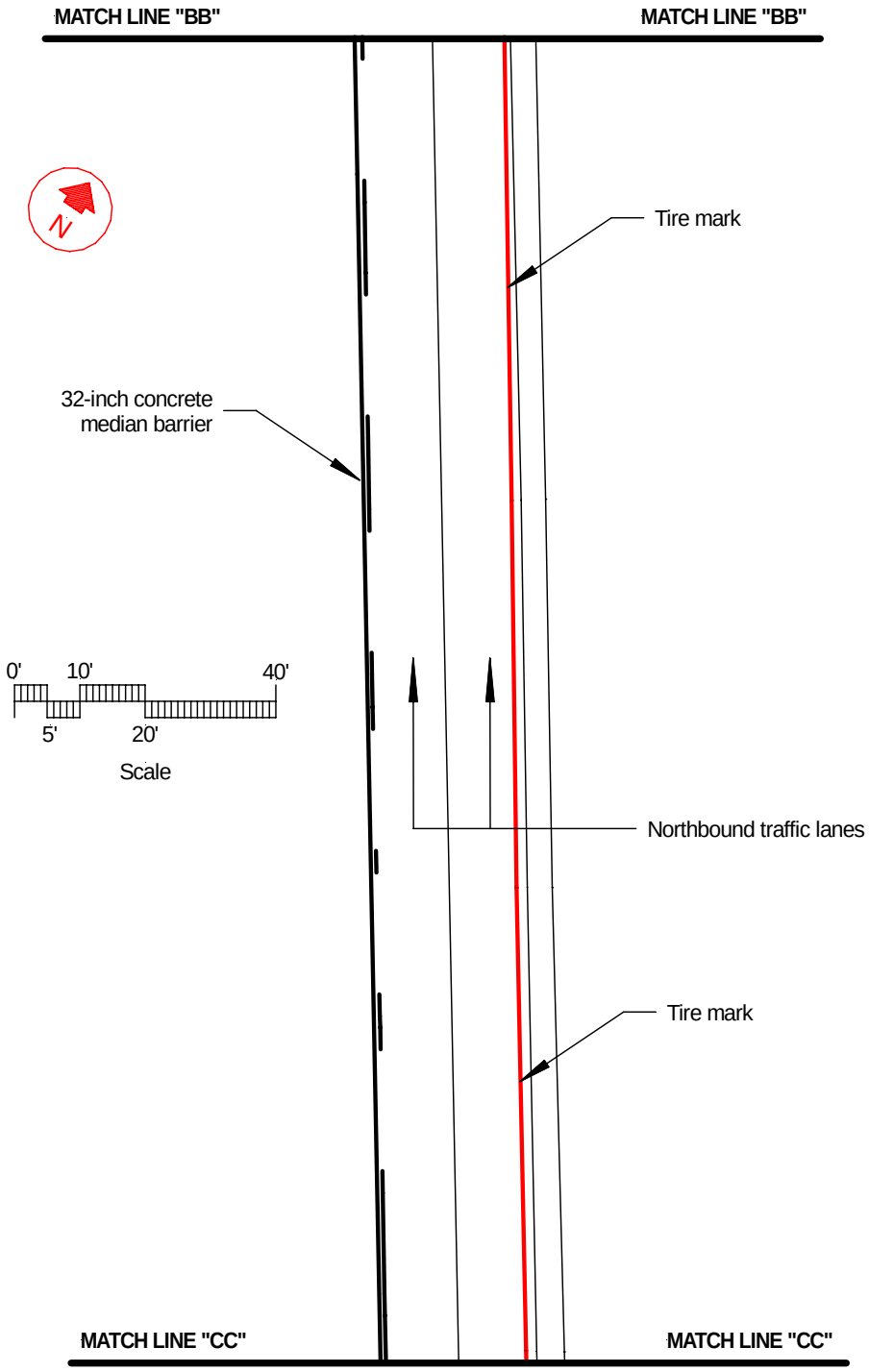

Figure 32 – NTSB map of BB-CC pavement markings and roadway evidence.

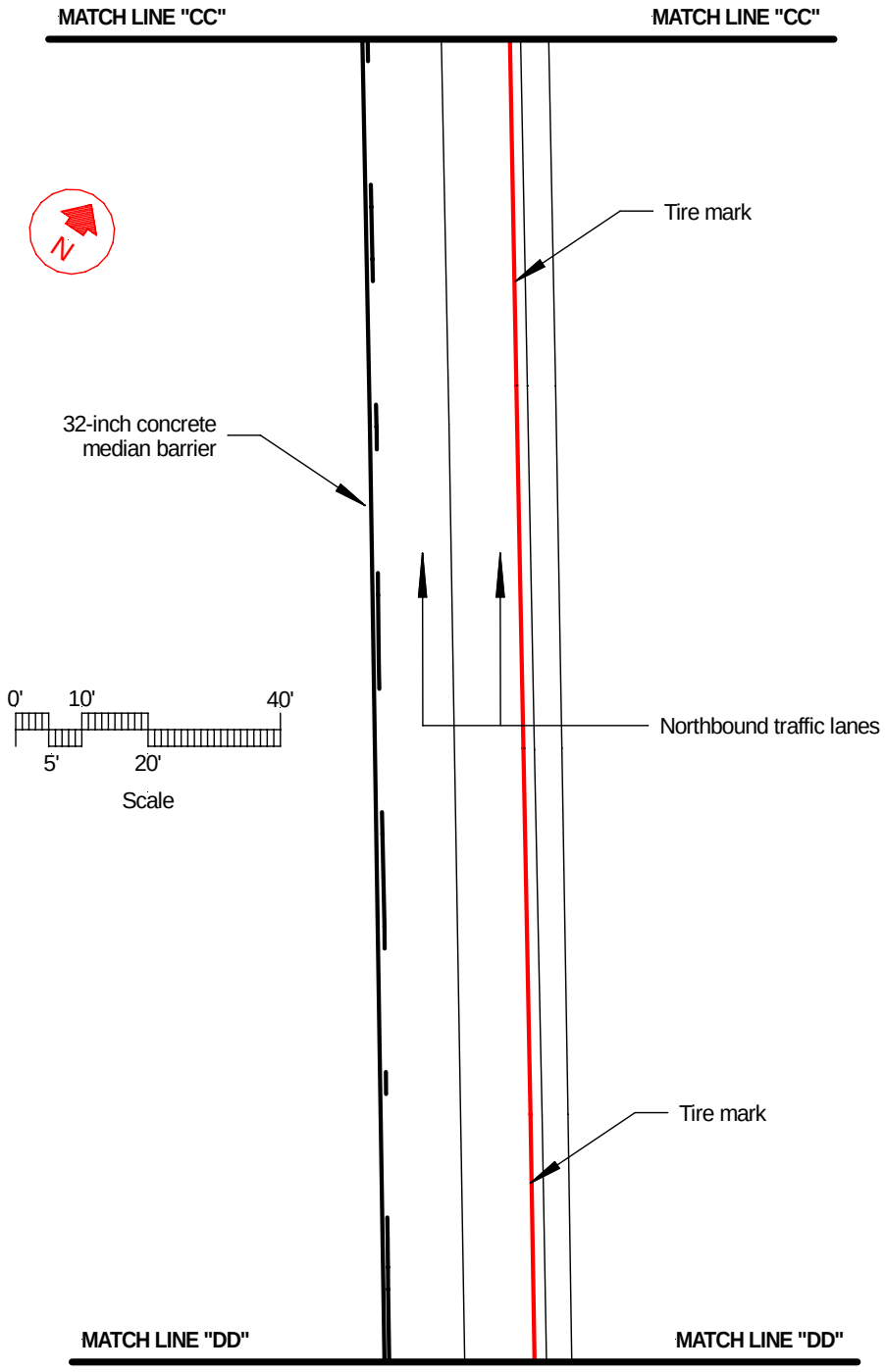

Figure 33 – NTSB map of CC-DD pavement markings and roadway evidence.

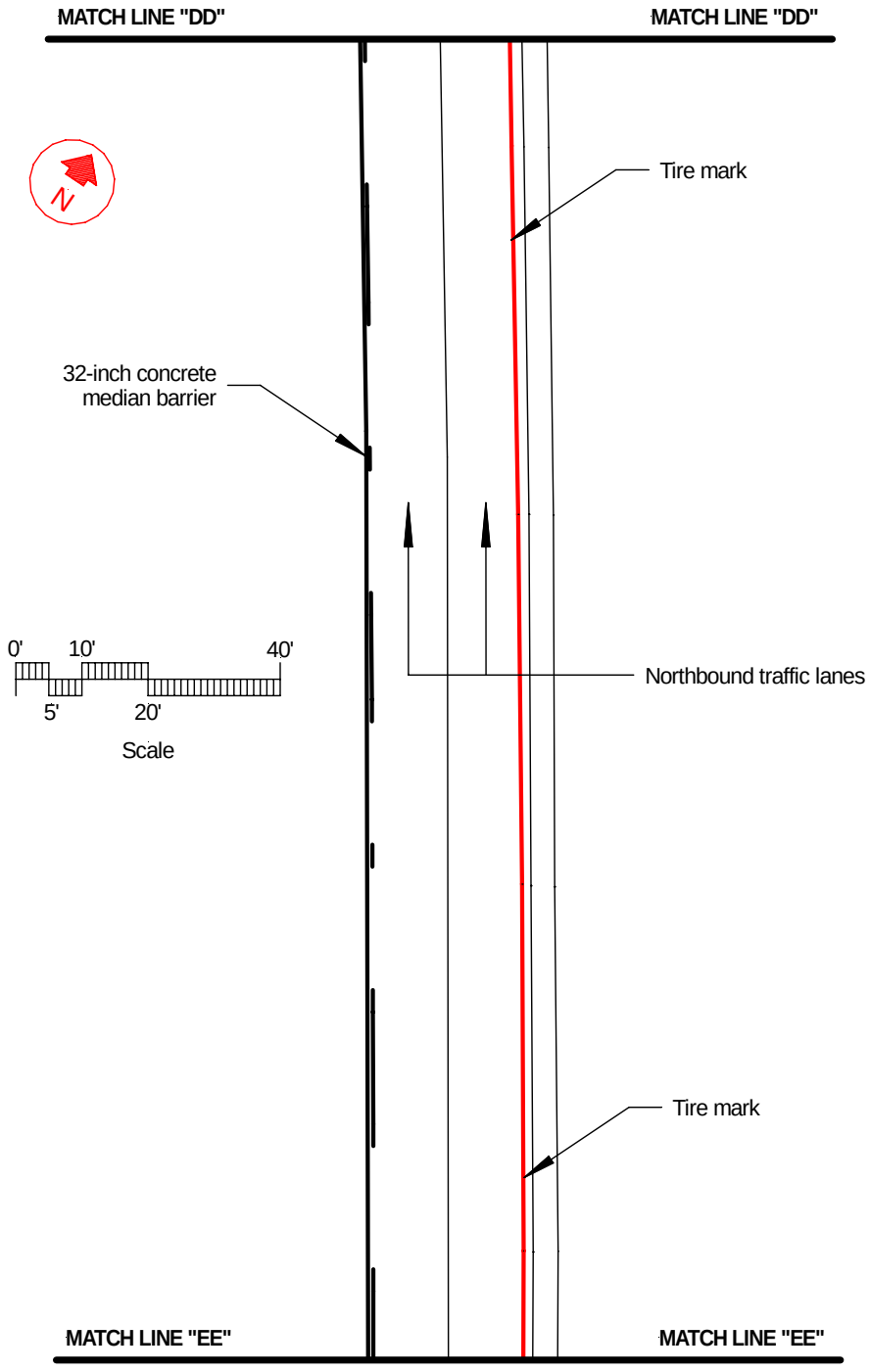

Figure 34 – NTSB map of DD-EE pavement markings and roadway evidence.

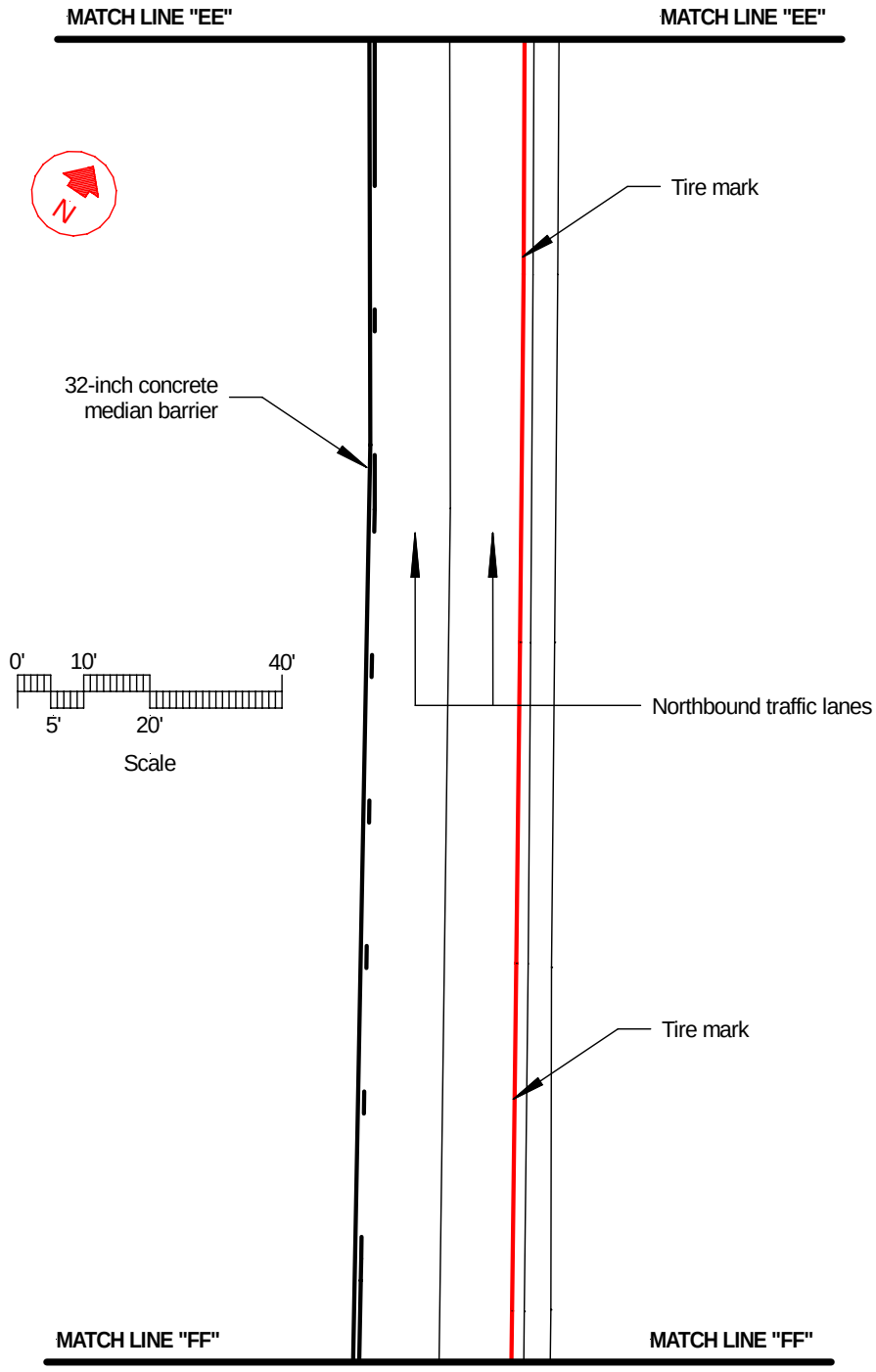

Figure 35 – NTSB map of EE-FF pavement markings and roadway evidence.

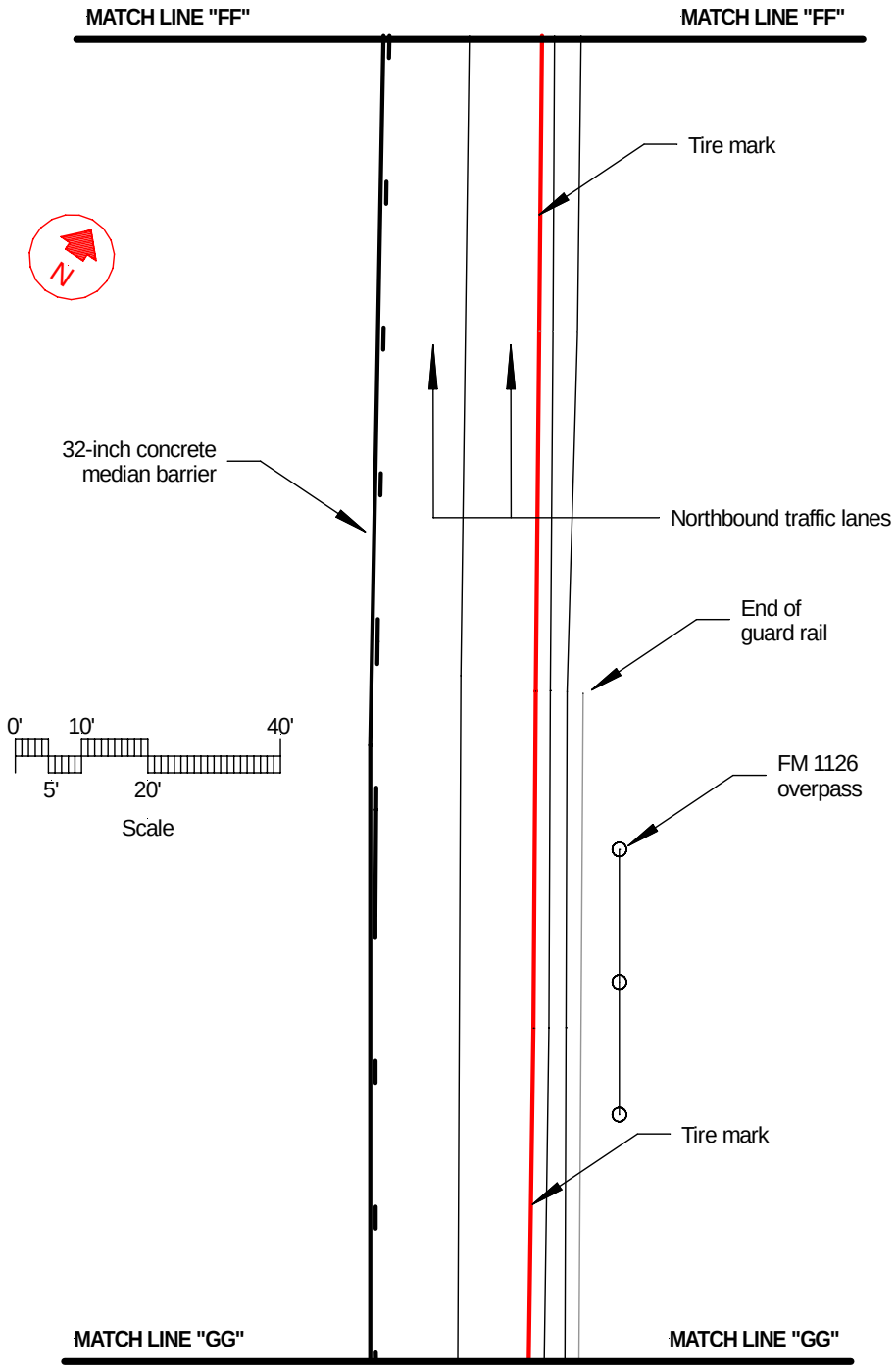

Figure 36 – NTSB map of FF-GG pavement markings and roadway evidence.

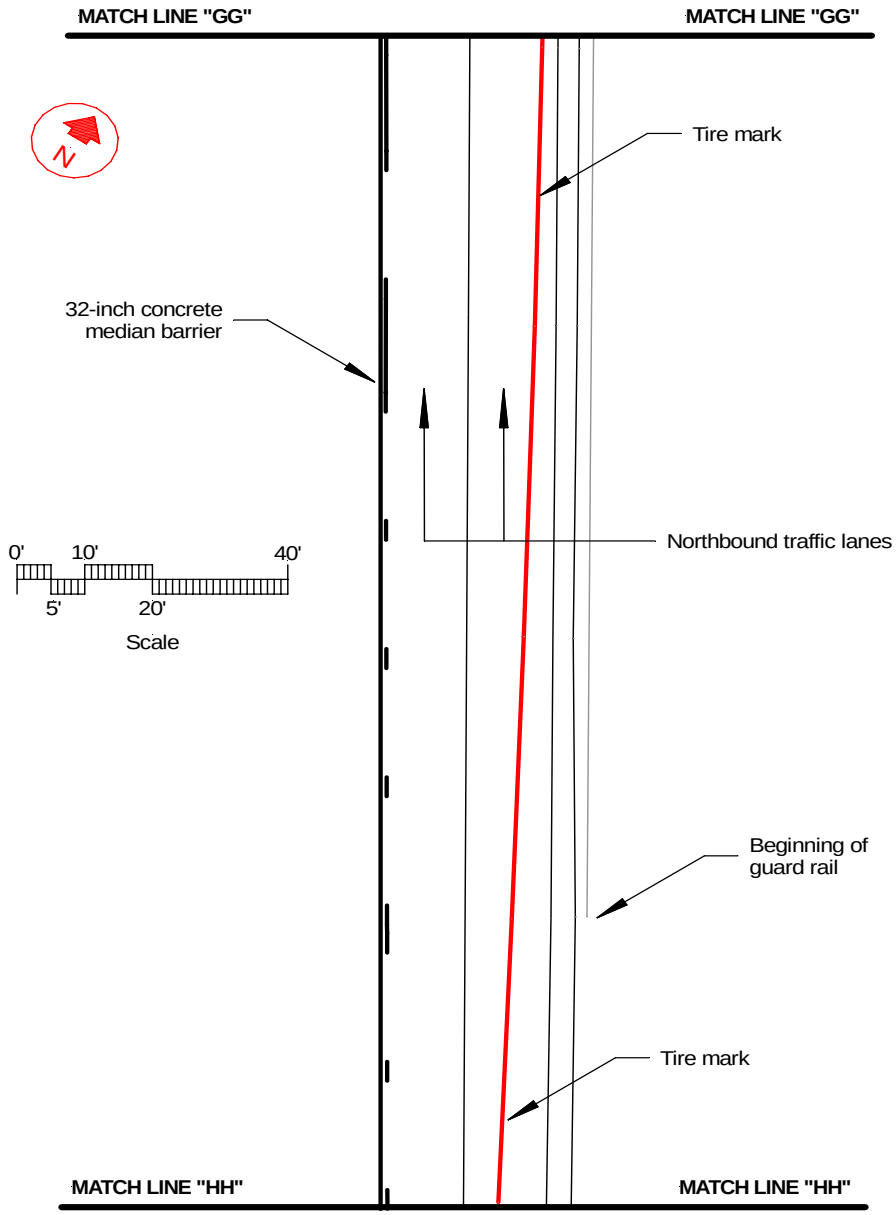

Figure 37 – NTSB map of GG-HH pavement markings and roadway evidence.

On Friday September 30, 2005 Safety Board investigators met with a representative from Bridgestone Americas Holding, Inc. at the accident site near milepost 269 and examined the roadway physical evidence with the assistance of the Dallas County Sheriff's Department Courtesy Patrol. In addition, video taping of both locations, near Exits 239 & 269, was conducted by Safety Board investigators and is included with the field information.

Robert Accetta
National Transportation Safety Board
Evidence Documentation and Mapping
Group Chairman

END OF DOCUMENT